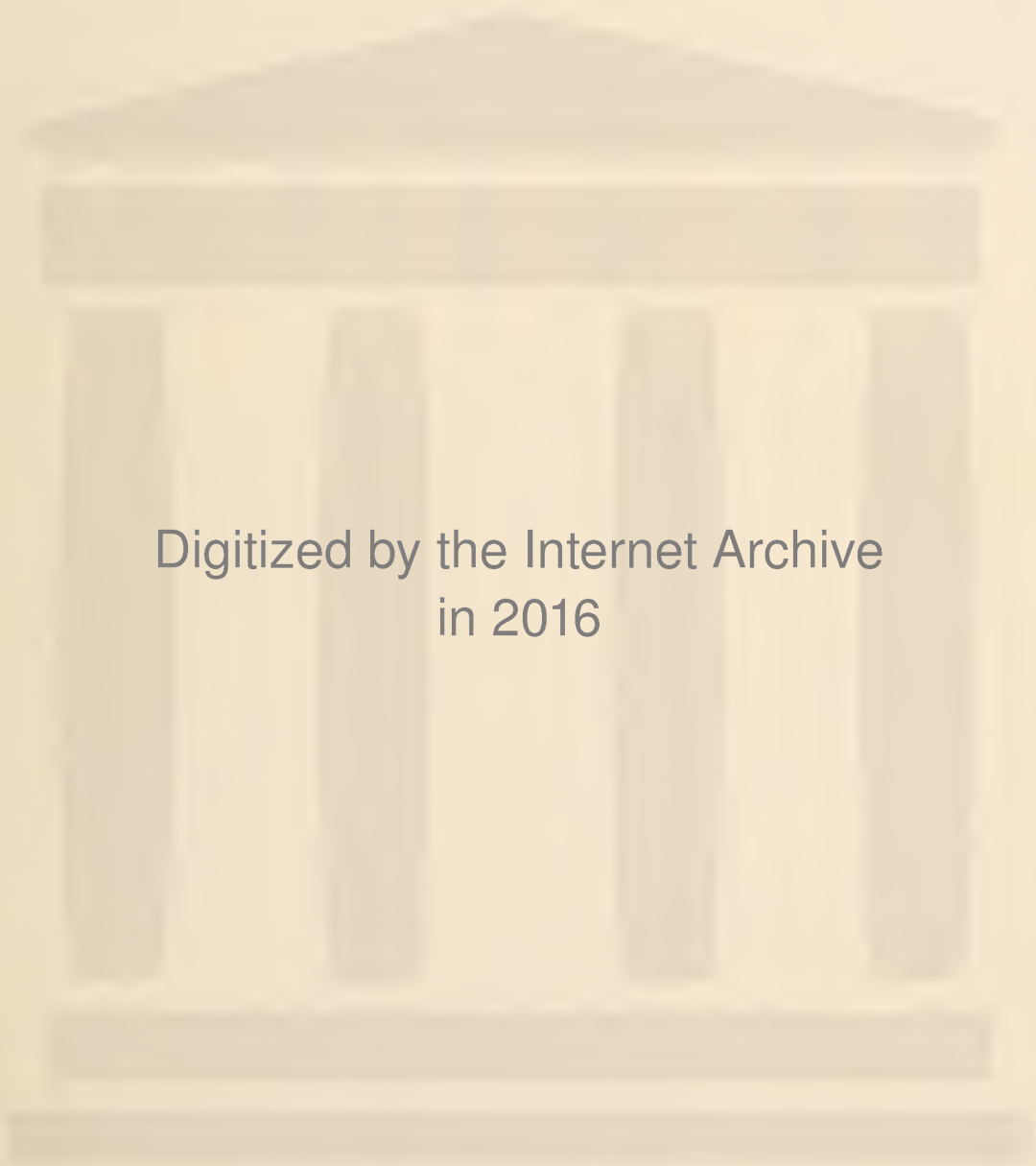
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July, 1962
Vol. XLIX, No. 1

The JOURNAL of the Florida Medical Association

PRESIDENT'S ADDRESS, S. CARNES HARVARD, M.D.

PROCEEDINGS OF ANNUAL MEETING

"WERE YOU THERE?" CHARLES J. COLLINS, M.D.

"ANNUAL MEETING: WHY CONTINUE SCIENTIFIC ASSEMBLIES?" NELSON H. KRAEFT, M.D.

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Precautions: It is essential that adequate blood studies be made during treatment with the drug. While blood studies may detect early peripheral blood changes, such as leukopenia or granulocytopenia, before they become irreversible, such studies cannot be relied upon to detect bone marrow depression prior to development of aplastic anemia.

References: (1) Minchew, B. H., & Cluff, L. E.: *J. Chron. Dis.* **13**:354, 1961. (2) Wallmark, G., & Finland, M.: *Am. J. M. Sc.* **242**:279, 1961. (3) Wallmark, G., & Finland, M.: *J.A.M.A.* **175**:886, 1961. (4) Welch, H., in Welch, H., & Finland, M.: Antibiotic Therapy for Staphylococcal Diseases, New York, Medical Encyclopedia, Inc., 1959, p. 14. (5) Hodgman, J. E.: *Pediat. Clin. North America* **8**:1027, 1961. (6) Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J A M A.* **173**:475, 1960. (7) Petersdorf, R. G., *et al.*: *Arch. Int. Med.* **105**:398, 1960. (8) Goodier, T. E. W., & Parry, W. R.: *Lancet* **1**:356, 1959.

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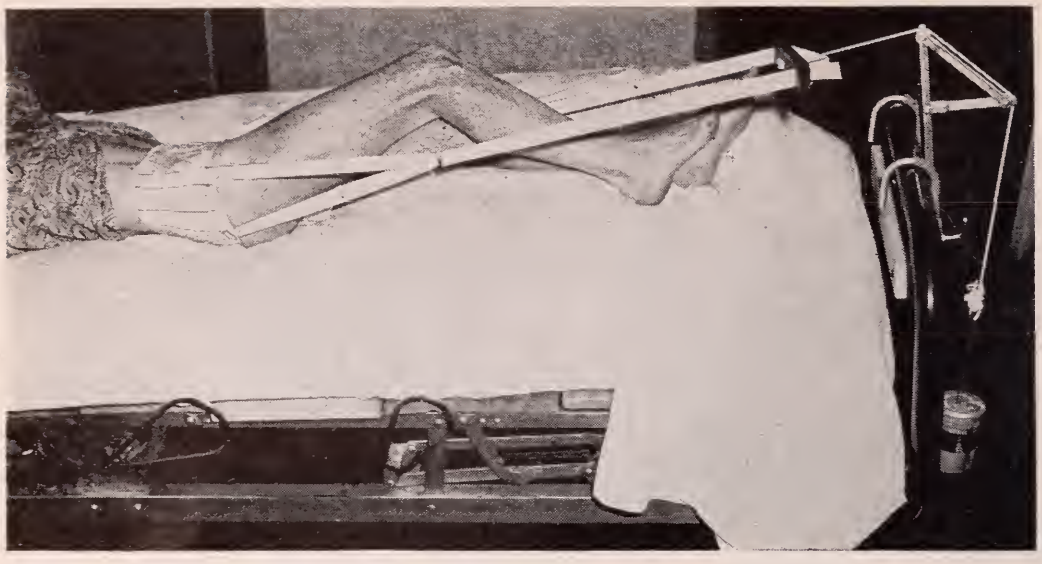
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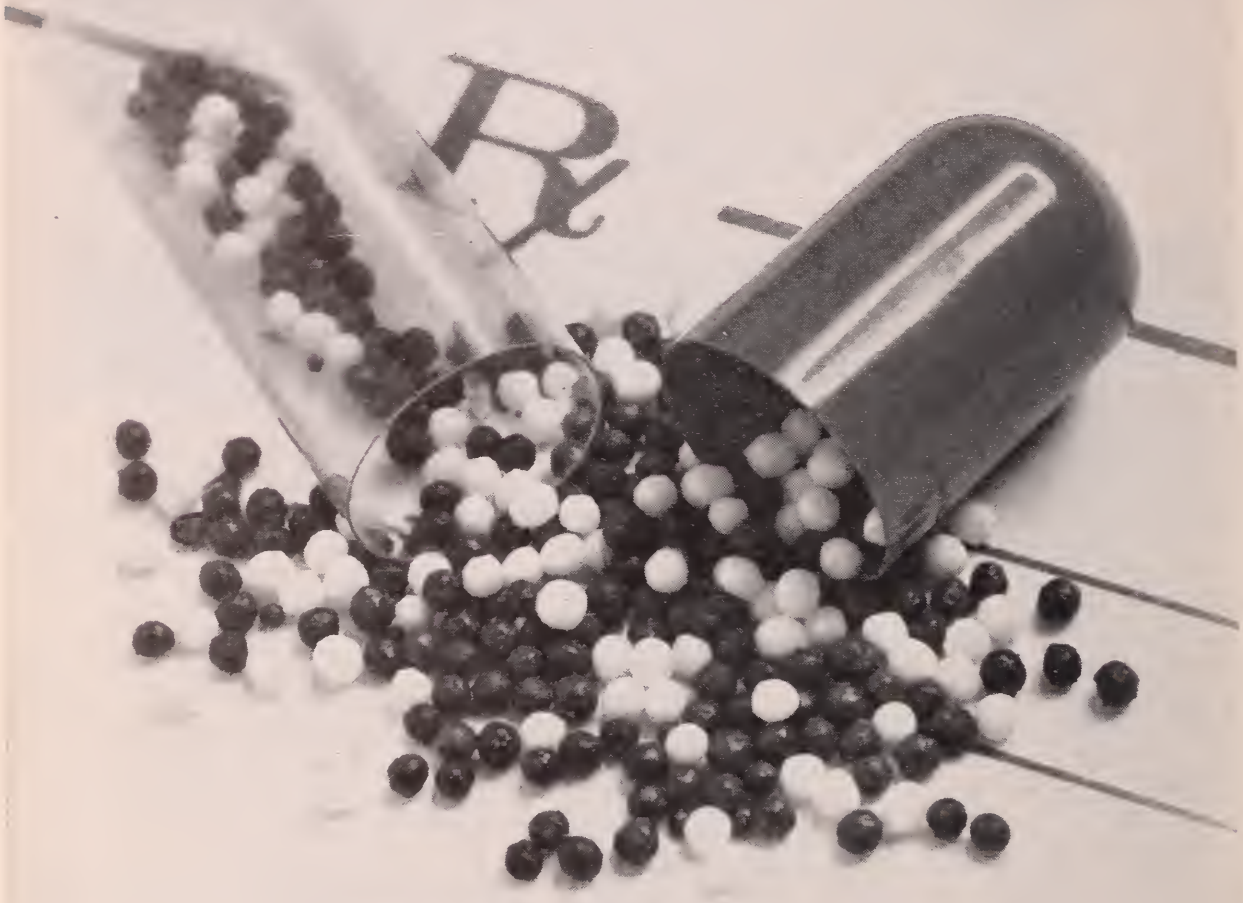
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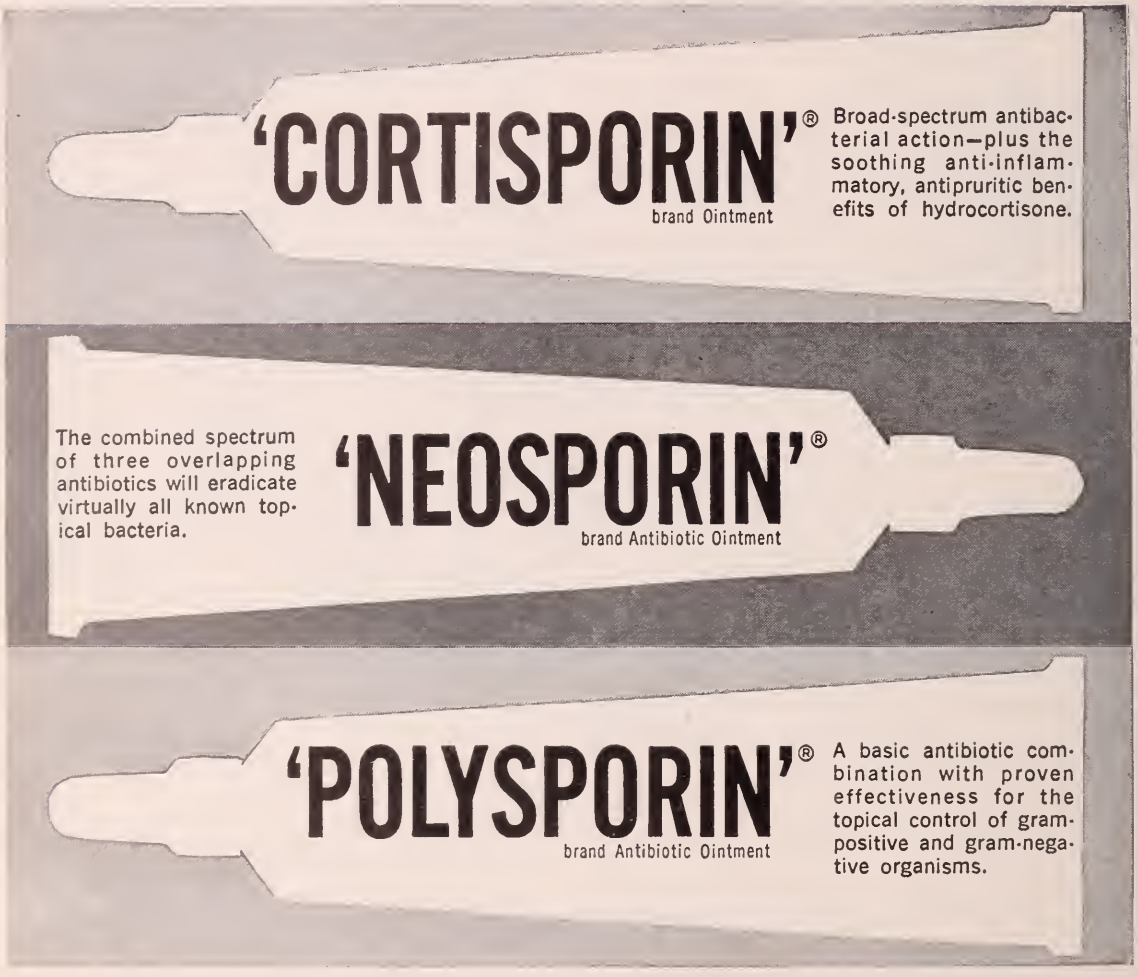
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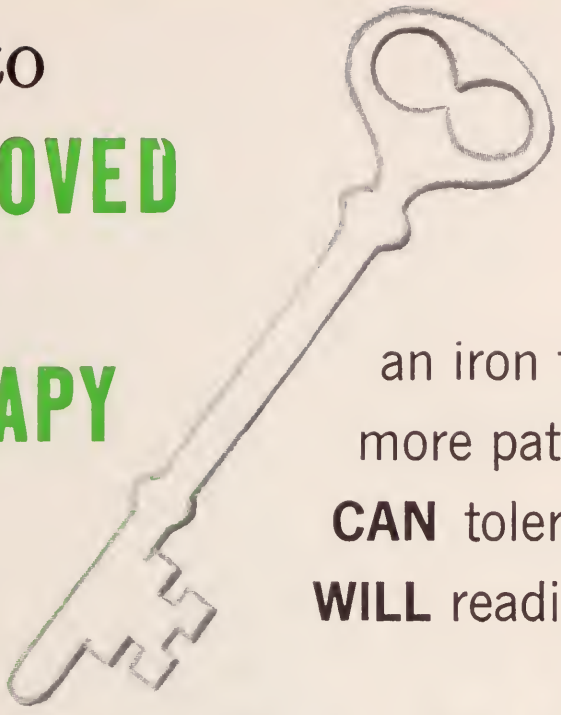
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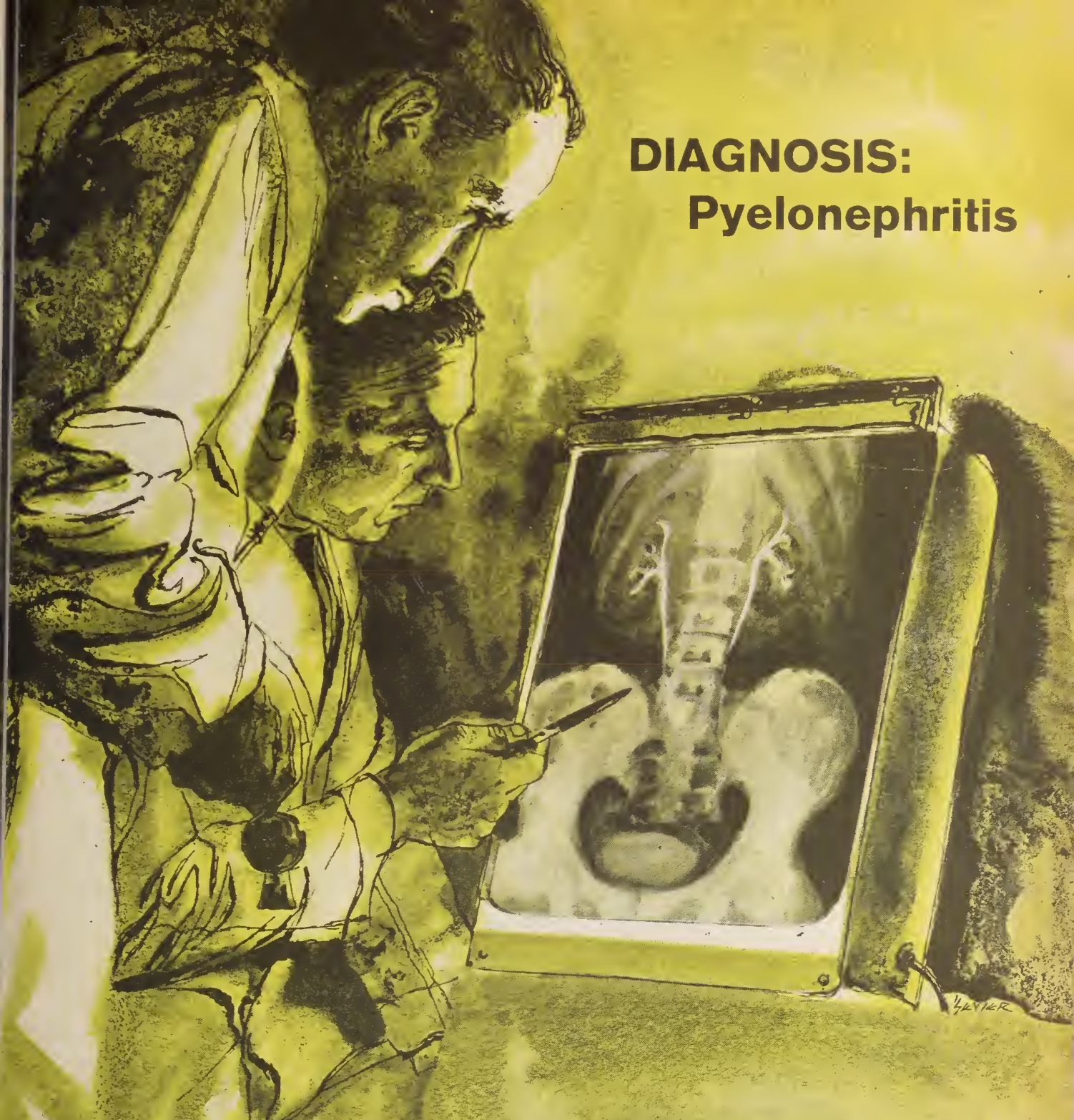
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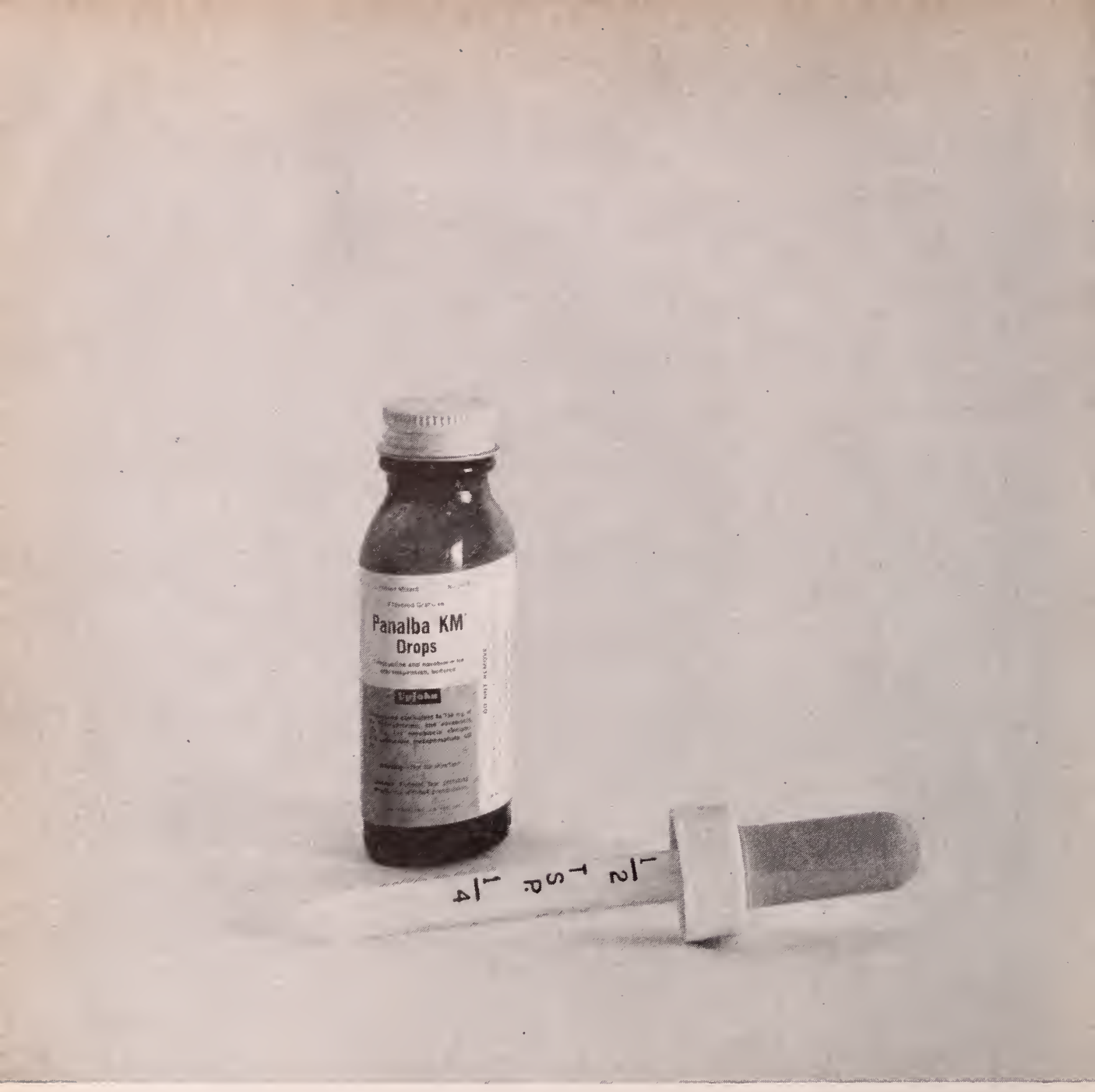
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President's Address

S. Carnes Harvard, M.D.
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Mr. Speaker, Members of the House of Delegates of the Florida Medical Association and Guests:

Ever since you honored me two years ago by electing me your president, this hour has been uppermost in my thoughts. I am sure only those who have preceded me can understand my feelings at this time. I know that each president who has gone before me has wanted this address to be his crowning achievement. I was proud that you had selected me and at the same time I could think of so many others in our Association who, in my opinion, would have made you a better president. I accepted the presidency with the firm determination in my heart to confirm your confidence in me and to do everything possible for my profession which I love so dearly. For any mistakes or blunders, therefore, which have occurred during my administration I accept full responsibility.

I have had the finest group of men on my Board of Governors that I think could be found in our organization. Their wise counsel and willingness to work have been a great help to me and to you. Your committees were hand-picked and without exception have responded far above the call of duty. Our entire organization, regardless of how small the task, has been loyal, and the help of all of you has been greatly appreciated. I would certainly be remiss if I did not express my sincere thanks and appreciation to all the members of the Florida Medical Association staff. The smart quarterbacking of Little Johnny Unitas Parham has helped us out of many close spots. I wish time would permit me to call out the names and thank each and every one of you publicly for what you have done for me and our organization during this past year. Let me urge you at this time to give the same loyal help to my very able successor.



Dr. Harvard

Today, I would like to talk to you very briefly on "What the Practice of Medicine Means to You—the Doctor and the Man." All of you have been well briefed on the complications and dangers facing American Medicine, and all I shall say on that subject is that it is indeed in a "parlous" condition which is most regrettable because of the fact that Medicine has reached its highest point through many laborious discoveries and the efficiency of our profession. Are we willing to sit by and see our accomplishments destroyed because of political expediency?

It is well to remember at this time that the history of American Medicine is one of the finest in all literature and should give to each and every

Read before the Florida Medical Association, Eighty-Eighth Annual Meeting, Bal Harbour, Miami Beach, May 10, 1962.

one of us a sense of pride and a sense of obligation for the many sacrifices made by those who have gone before us.

From the beginning of colonial days the doctors showed an interest in all facets of life that go into building a new nation, such as teachers, government officials, farmers and merchants, as well as their duties in caring for the sick. Almost without exception they were leaders in their communities, and five Doctors of Medicine signed the Declaration of Independence. During the American Revolution we find that the choicest and finest men of Medicine were sent to the battlefields; this fact has always been true and in every conflict in which our country has been involved, the doctor has always been there. Within the memories of most of you, the cream of the doctors were called up for service in the last World War and they carried on the tradition of American Medicine to their own personal sacrifice. I feel that today we should pay full tribute to every doctor who was called, remembering that many made the supreme sacrifice for the love of their country. In the hospital, on the battlefield and in politics, history assures us that our profession played an important part in building a great nation of individual freedom and democracy. Now it is our duty and privilege to give our very best, both as citizens and physicians.

In making this address I have found it very hard to stay away from personal references; so, frankly, I am of necessity going to have to use some more. About 32 years ago when I was graduated from medical school, the commencement address was delivered by the Reverend Ernest Rattenbury of London, England. He used as his title these two words, "Live Dangerously." Much of his address has been long forgotten by me, but his plea to this class, whose members were just entering into their chosen profession, was that everyone should strive for excellence against mediocrity. He most emphatically stated that neither "God nor the Devil would tolerate mediocrity." As an example of his title he reminded us of Browning's "Grammarian's Funeral." Perhaps all of you are familiar with the Grammarian who worked night and day over his books, paying no heed to those who urged him to rest. He was striving for excellence and firmly believed that man had Always and that Immortality was his final reward.

The famous parable of the talents teaches all of us that there are calculated risks that individually and collectively we must take if we expect to reach our goals, and always there are dangers.

Certainly in this day of crisis and seemingly world revolution, it is important that we multiply our talents; otherwise, will we have a medical profession tomorrow? There is too much at stake in this profession for a mediocre person. Keeping this famous quotation in mind, "A man's reach should exceed his grasp," and facing our grave responsibilities with the full knowledge that the profession of medicine was founded for the benefit and welfare of all mankind will make us "Live Dangerously" both in fiction and in fact. We cannot all excel in the same things, but each one of us has talents which we must not only preserve but multiply. In order to do so, we must live dangerously. I admit that there is a fine line which must be drawn, but it is up to us individually and collectively to see that we are making progress, and this cannot be done by holding onto our single talent.

The medical profession is an old profession, an honored profession; it is a profession that has progressed with the years. Its members have been made up of men of honesty and integrity. History shows that Medicine has been in the forefront in all just causes. In my opinion this is because doctors, as a whole, live dangerously whether we realize it or not. They have taken calculated risks in many instances to the detriment of their own health. We of this generation cannot afford to compromise or fail to fight those forces which are constantly trying to destroy not only us but the American people whom we have worked for ever since we have had a country.

Perhaps the concept of the doctor has changed in recent years. It is now predicted that the doctor will replace the cowboy on TV in 1963. It is even said that the women are having some sort of a blouse designed for themselves—one group preferring the one Dr. Casey wears and another group preferring Dr. Kildare's. This, like many things in Medicine, is open to argument, but as for what it does for the looks of the women, I would prefer neither one.

Ours is a proud profession and justly so, but we must not allow ourselves to become arrogant and lose the respect of the people whom we fondly like to call our patients. These patients deep in their hearts are for us. We simply have not kept them up to date on what is happening. I think the blame is ours and I think that recently we have begun to accept this responsibility. We

have many allied groups who are willing to help, but the leadership still must come from us. It is a grave responsibility that we have, and in my opinion, there has never been a time in history that we have been needed more. It is true that we will have to live dangerously to accomplish this challenge, but the calculated risk is very simple. We either do our utmost and thereby save Medicine as we know it, or become enslaved, which has never happened before in America. We are free men with rights and freedom which we must defend at any cost. We must not allow ourselves to seek monetary gains at the sacrifice of our principles which have proven right throughout the years. We must ever be alert to infiltration as well as massive attacks.

We should see to it that the young men in our medical schools today realize what the problem is and what we have been doing to combat it. They should be made to understand that these things which we are doing to preserve Medicine are chiefly for them and not so much for us. Many of us who are here today will not be practicing long, but we should endeavor to pass on to the coming generation of doctors a rich heritage which must not be sold for a bowl of porridge.

And now in closing I would like to paraphrase a bit of the last paragraph of David Copperfield's story: "My task is almost complete. I have labored hard and long but I am surrounded by you my friends and without you I would be as nothing."

Proceedings
Eighty-Eighth Annual Meeting

Florida Medical Association

Bal Harbour, Miami Beach, May 10-13, 1962

General Session

The General Session of the Eighty-Eighth Annual Meeting of the Florida Medical Association was called to order at 11:30 a.m., Friday, May 11, 1962 in the Grand Ballroom, Americana Hotel, Bal Harbour, Miami Beach, by President S. Carnes Harvard.

Dr. Harvard: "The invocation this morning will be given by the Reverend George H. Murphy of Grace Chapel Parish Episcopal Church, Jacksonville, Florida."

Reverend Murphy: "Almighty God, Who art the Father of truth and understanding, the Healer of all our diseases, who knowest how the sick have need of a physician, bless all whom Thou hast called to share in Thine own work of healing. Give unto them health of body and soul and mind that they may learn their art in an awareness of Thee, and exercise their skill always under Thy sanction and to Thy glory. Shed forth the light of Thy heavenly guidance upon those who are engaged in medical and surgical research; grant unto them the spirit of patient discernment that they may be skilled sufficient to discover the way of health and strengthen them with the assurance that they are fellow-workers together with Thee; through Jesus Christ, our Lord. Amen."

Dr. Harvard: "I am very glad that I was able to obtain Dr. Durward G. Hall, Republican member of the Congress from Springfield, Missouri, as our guest speaker. Dr. Hall thinks like we do, or possibly I should say that we are in step with him.

"Dr. Hall was born in Cassville, Missouri, September 14, 1910, and is a 1934 graduate of Rush Medical College of the University of Chicago. During World War II, he rendered extended and distinguished military service.

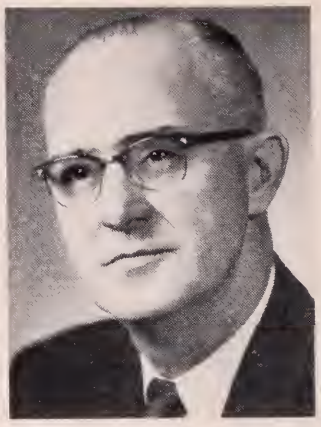
"Dr. Hall has practiced with the Smith-Glynn-Callaway Clinic since 1936 and since 1947 has

specialized in general surgery. He is a fellow of the American College of Surgeons and a past president of the local chapter. He is also a diplomate of the American Board of Surgery. At present he is a member of the House of Delegates of the American Medical Association.

"Nominated as a Republican candidate for the Congress on August 22, 1960, Dr. Hall was elected by a 19,900 vote majority on November 8, 1960. He is assigned to the House Armed Service Committee. He has been designated as one of two special Congressional Advisers to the United States Delegation attending the Fifteenth Annual Assembly of the World Health Organization in Geneva, Switzerland, later this month. In fact, Dr. Hall will have to leave from here on Sunday to make this assignment. This appointment was announced only this week by President Kennedy. It is noteworthy that Congressman Hall was nominated for this assignment by the Speaker of the House on recommendation of the House Minority Leader, Charles A. Halleck.

"It was my pleasure to hear Dr. Hall last year at the American Medical Association Meeting in New York, and I am sure that he has a message which you will all be glad to hear. Dr. Hall."

Congressman Hall presented an introspective and philosophical description of the national legislative scene as viewed through the eyes of a physician. The audience was frequently amused as he related illustrations of the sometimes striking contrasts in his double life as a doctor and a legislator. Emphasizing the importance of effective communication between the various segments of the public and members of the Congress, he explained the motivating factors behind the actions of Congressmen on different issues. In stressing that the practice of medicine cannot be separated from an obligation to participate in the affairs of government, Dr. Hall called upon physicians to provide all possible support to political candidates of their choice and to take a more active part in public affairs in general. Following his forceful address, he was given a standing ovation.



Dr. Hall

Dr. Harvard: "Thank you, Dr. Hall. I think you all agree with me that he does think like we do.

"The meeting is now adjourned."

First House of Delegates

The House of Delegates of the Florida Medical Association convened at 9:30 a.m. on Thursday, May 10, 1962 in the Grand Ballroom of the Americana Hotel, Bal Harbour, Miami Beach, Florida, with Dr. Joseph S. Stewart, Speaker of the House, presiding.

The invocation was delivered by the Reverend Clyde C. Frazier of Fort Lauderdale, who for many years was President Harvard's pastor: "Almighty God, Father of our Lord and Saviour Jesus Christ, Maker of all men, and ever the Judge of Thy children of Earth, we humbly beseech that Thou wilt make each of us an instrument of Thy peace. Where there is hatred in our hearts, help us to replace the hatred with love; where there is resentment, let us replace the resentment with forgiveness; where there is discord, let us put unity; where there is doubt, let us put faith; where there is error, let us put truth, and where there is despair, let us become the purveyors of happiness. And when we find ourselves in the midst of sadness, may we know and be able to impart that inner joy that only Thou canst give. And let us be as lights shining in the darkness, in the sickroom, in the homes where there is anxiety; and through all, may we walk as people who know Thee and who serve Thee. Grant that we may desire rather to console than to be consoled; to understand rather than to be understood; to love rather than to be loved.

"Help us to know that it is in giving that we receive; that it is in forgiveness that we find the happiness of life even as we forgive. Finally, dear God, may we ever acquit ourselves as good physicians and servants and handmaidens of Thine with that poise of soul, and that comforting, healing touch that shall bring a bit of Thy heaven on Earth in the hearts and the minds of Thy people. And in dying, may we be raised to eternal life. We ask in the name of the One who taught us to pray, Our Father, Which art in Heaven, hallowed be Thy name. Thy kingdom come, Thy will be done on Earth, as it is in Heaven. Give us this day our daily bread, and forgive us our trespasses as we forgive those who trespass against us. And lead us not into temptation, but deliver us from evil, for Thine is the kingdom, and the power, and the glory, for ever and ever. Amen."

The Speaker announced the membership of the Credentials Committee: Dr. Ralph M. Overstreet Jr., Chairman; Dr. Henry L. Harrell and Dr. Franklin J. Evans.

The Chairman of the Credentials Committee, Dr. Overstreet, stated that out of 209 delegates, 171 were officially seated, constituting a quorum. Dr. Ralph Herz moved that the delegates be seated. Motion was seconded and carried.

Delegates

ALACHUA—Henry J. Babers Jr., Charles H. Gilliland, Walter E. Murphree, Peter F. Regan III.
BAY—John J. Benton, Henry C. Smallwood.
BREVARD—Jack T. Bechtel, Willard H. H. Bennett, Theodore J. Kaminski, Allen E. Kuester.
BROWARD—Miles J. Bielek, Russell B. Carson, Frederick W. Fisher, Richard L. Foster, Anthony C. Galluccio, Walter J. Glenn Jr., David J. Lehman Jr., John H. Mickley, Robert U. Moersch, Lees M. Schadel Jr., W. Dotson Wells, Scottie J. Wilson.
CHARLOTTE—*(Absent—Carl N. Reilly)*
CLAY—Thomas L. Glennan
COLLIER—William J. Bailey
COLUMBIA—Harry S. Howell
DADE—Julius Alexander, Seymour L. Alterman, James L. Anderson, William G. Aten Jr., Turner E. Cato, Vincent P. Corso, Richard C. Clay, Jack Q. Cleveland, Edward W. Cullipher, DeWitt C. Daughtry, H. Clinton Davis, Robert F. Dickey, L. Washington Dowlen, Franklin J. Evans, W. Tracy Haverfield, James J. Hutson, John B. Liebler, Robert P. Keiser, Donald F. Marion, Samuel W. Page Jr., Warren W. Quillian, Hunter B. Rogers, Walter W. Sackett Jr., William A. Shaver, Clifford C. Snyder, William M. Straight. *(Absent—Edward R. Annis, Martin S. Belle, Morris H. Blau, Rufus K. Broadaway, Francis N. Cooke, Victor D. Dembrow, Raymond L. Evans, Willard L. Fitzgerald, Richard M. Fleming, M. Eugene Flipse, Maurice M. Greenfield, Morton M. Halpern, John V. Handwerker Jr., Thomas W. Hutson Jr., Paul S. Jarrett, David Kirsh, Banning G. Lary, Joseph Lomax, Harold Rand, Nelson Zivitz)*
DESOTO-HARDEE-GLADES—Gordon H. McSwain
DUVAL—Sam C. Atkinson, Robert J. Brown, Charles H. Burke, Hugh A. Carithers, Clyde M. Collins, James E. Cousar III, Thomas S. Edwards, Emmet F. Ferguson Jr., A. Judson Graves, Karl B. Hanson, Thomas M. Irwin, Edward Jelks, Joseph J. Lowenthal, Harry W. Reinstine Jr., Ashbel C. Williams
ESCAMBIA—Alpheus T. Kennedy, Sidney G. Kennedy Jr., John M. Packard, Walter C. Payne Sr., Joseph L. Rubel
FRANKLIN-GULF—John W. Hendrix
HIGHLANDS—Donald C. Hartwell
HILLSBOROUGH—Herschel G. Cole, Thomas W. Dorr, Irving M. Essrig, H. Phillip Hampton, Samuel G. Hibbs, Richard S. Hodes, Eugene B. Maxwell, David R. Murphey Jr., James N. Patterson, Madison R. Pope, Marshall E. Smith, James A. Winslow Jr.
INDIAN RIVER—Erasmus B. Hardee
JACKSON-CALHOUN—Richard H. Schulz
LAKE—Frederick C. Andrews, J. Basil Hall
LEE-HENDRY—Fred D. Bartleson, James L. Bradley
LEON - GADSDEN - LIBERTY - WAKULLA - JEFFERSON—Nelson H. Kraeft, George S. Palmer, Stuart C. Smith, Robert N. Webster
MADISON—Thomas G. Bouland Jr.
MANATEE—Irving E. Hall Jr., Joseph F. P. Newhall Jr.
MARION—Henry L. Harrell *(Absent—Herbert M. Webb Jr.)*
MONROE—Ralph Herz
NASSAU—Cecil B. Brewton
ORANGE—Chas. J. Collins, Norman F. Coulter, Harry H. Ferran, Truett H. Frazier, Lawrence H. Kingsbury, Louis C. Murray, Roger E. Phillips, Charles R. Sias, W. Dean Steward, Miles W. Thomley, Robert L. Tolle
PALM BEACH—James F. Cooney, Philip O. Lichtblau, Samuel A. Manalan, Ralph M. Overstreet Jr., Cecil M. Peek *(Absent—Willard F. Ande, Edwin W. Brown, C. Jennings Derrick, Walter R. Newbern)*
PASCO-HERNANDO-CITRUS—Gail M. Osterhout
PINELLAS—Clyde O. Anderson, Edward L. Cole Jr., William J. Dean, Charles K. Donegan, Chas. L. Farrington, Earl R. Fox, William H. Keeler III, Francis H. Langley, James K. McCorkle, Norval M. Marr Jr., William G. Mason, Walter H. Winchester, Rowland E. Wood
POLK—John E. Daughtrey, Marion W. Hester, Albert G. King Jr., Charles Larsen Jr., Willard E. Manry Jr., Arthur J. Moseley Jr.
PUTNAM—Grover C. Collins
ST. JOHNS—Reddin Britt
ST. LUCIE-OKEECHOBEE-MARTIN—John M. Gunsolus, Howard C. McDermid
SARASOTA—John M. Butcher, Karl R. Rolls, Millard B. White *(Absent—Melvin M. Simmons)*
SEMINOLE—Vann Parker
SUWANNEE-HAMILTON-LAFAYETTE — *(Absent—Hugo F. Sotolongo)*
TAYLOR—Charles R. Wiley
VOLUSIA—John J. Cheleden, William H. Eyster Jr., William H. Harrison Jr., Robert L. Stevenson, Russell L. Welsh
WALTON-OKALOOSA-SANTA ROSA—John W. Reece, William W. Thompson
WASHINGTON-HOLMES—*(Absent—Walter H. Shehee)*
COUNCIL ON SPECIALTY MEDICINE—William H. Anderson Jr., James D. Beeson, Jack H. Bowen, James T. Cook Jr., John P. Ferrell, Christian Keedy, Jack A. MaCris, Wendell J. Newcomb, William A. Van Nortwick, Scheffel H. Wright *(Absent—Harry M. Edwards, John B. Miale, Bernard L. N. Morgan, Rodman Shippen, James R. Sory)*
OFFICERS AND EX-OFFICIO MEMBERS—Reuben B. Chrisman Jr., Samuel M. Day, Burns A. Dobbins Jr., S. Carnes Harvard, Francis T. Holland, Meredith Mallory, Eugene G. Peek Jr., Ralph S. Sappenfield, Joseph S. Stewart, Leo M. Wachtel, Robert E. Zellner

The Speaker asked for a motion for the correction or adoption of the minutes of the 1961 meeting as published in the July 1961 issue of The Journal of the Florida Medical Association.

Motion was made that the minutes be adopted.

Motion seconded and carried.

The Speaker introduced Dr. James L. Anderson, President of the Dade County Medical Association, the host society, who gave the address of welcome.

Dr. Anderson invited the delegates to visit and inspect the Dade County Medical Association building and the excellent medical facilities in Dade County. He advised them of the superb recreational opportunities they have while visiting Miami. After welcoming the Florida Medical Association to Miami on behalf of the Dade County Medical Association, he apprised the delegates of the growth of the Dade County area and the concommitant growth of the Dade County Medical Association.

The Speaker introduced the officers seated at the Speaker's table: President S. Carnes Harvard, Vice President Ralph S. Sappenfield, Vice-Speaker Eugene G. Peek Jr., President-Elect Robert E. Zellner, Secretary-Treasurer Samuel M. Day and Mr. W. Harold Parham, Executive Director.

The Speaker called the Delegates' attention to the insurance information which was included in the Delegates' packets.

Remarks of the Speaker

JOSEPH S. STEWART, *Speaker*

Referred to: Reference Committee No. III
Finance and Administration

The Speaker would like to remind all members of the Florida Medical Association who are present that it is their privilege and duty to appear before the Reference Committees to give their views on any resolution in which they are interested.

It is the duty of a presiding officer to expedite the business of the House as much as possible, but it is also the right of Delegates to speak on any question which comes before the House. The Speaker therefore urges you to rise and be recognized at any time. It is well to remember that free discussion is a fundamental part of democracy and it is your privilege and your right to express your views.

The Speaker urges all Delegates to object at any time to any ruling which the Speaker makes. Such an objection is likewise a fundamental part of a free democracy because it guarantees that the will of the majority shall prevail. The Speaker requests the Delegates to address all remarks to the Speaker and to avoid personalities completely. It is well to remember that we are here to discuss resolutions and not to discuss personalities.

The Speaker cannot let this opportunity go by without expressing to the members of the Florida Medical Association his deep appreciation for the honor given him in being the first Speaker of the House of Delegates of the Florida Medical Association. It is an honor which he will never forget. As he now ends his 35 years of active service as a member and worker of the Florida Medical Association, he will always remember, with great pleasure, this honor of serving as your Speaker.

The Speaker introduced Dr. Thad Moseley, Chairman of the Scientific Council, who briefly outlined the scientific program for the meeting and invited the Delegates to attend the scientific assemblies.

President Harvard introduced Dr. F. J. L. Blasingame, Executive Vice President of the American Medical Association, who then addressed the House of Delegates:

"President Harvard, other officers and members of the Florida Medical Association, Woman's Auxiliary, fellow physicians and guests: I am indeed honored to be here with you today. My wife and I appreciated an opportunity to be with you. She could not come, and my visit has to be abbreviated. I bring you greetings from your American Medical Association. We look upon the AMA as gaining its real meaning and strength from the grass roots level and those opportunities and decisions that confront men of medicine as they serve the public in education, research and medical practice are expressed through the constituent county medical societies making up the American Medical Association. We look upon the Florida Medical Association as being a particularly strong society. You have made some signal contributions to the American Medical Association. We all honor the memory of Dr. Louis M. Orr, Past President of the American Medical Association, and we honor Dr. Homer L. Pearson Jr., Trustee, and your Delegates—Dr. Chrisman, who also serves on the Council on Legislation, and Drs. Mallory, Dobbins and Holland, to name some of those who have worked diligently at the national level.

"I must confess to you that this morning I had a much more formal paper to read. I brought my paper to the hotel but not to the meeting room because I felt that some of the things I needed to talk with you about are off the cuff." Doctor Blasingame rendered an eloquent presentation of the problems facing the physicians of America, the positive program of organized medicine and the recent development in Washington regarding medical legislation.

Following Dr. Blasingame's presentation, the House of Delegates accorded him a standing ovation.

The Speaker recognized Mrs. W. Dean Steward, President of the Woman's Auxiliary of the Florida Medical Association, and Mrs. Edward W. Ludwig, President-Elect.

Dr. William P. Harbin Jr., Past President of

the Medical Association of Georgia, was recognized as the fraternal delegate from Georgia.

President Harvard introduced Mrs. Harvard and their daughter, Jane.

Mr. Jack Monahan, Executive Director of the Florida Hospital Association, was recognized by the President.

President Harvard introduced Miss Cappleman, and advised the delegates that she has been his nurse for 30 years.

Dr. José Jiminez Veléz was recognized as the fraternal delegate from Puerto Rico.

President Harvard introduced The Honorable Reginald L. Williams, President of The Florida Bar, who brought greetings from that organization. Dr. Williams stated that the members of the legal profession and the members of the medical profession should work together, and that the exchange of Presidents at the two annual meetings is a step in the right direction.

Mr. H. A. Schroder, Executive Director of Blue Shield of Florida, was introduced.

President Harvard introduced Harry T. Gray Esq., legal counsel for the Florida Medical Association.

President Harvard then read the names of members who have been honored during the year by other organizations:

Honorary Citations
Florida Medical Association Members

HOMER L. PEARSON JR., MIAMI—Elected to Board of Trustees of the American Medical Association.

EDWARD H. WILLIAMS, CORAL GABLES—AMA Committee on Aging since December 1958.

H. PHILLIP HAMPTON, TAMPA—AMA Committee on Indigent Care since 1958.

BURNS A. DOBBINS JR., FORT LAUDERDALE—AMA Committee on Federal Medical Services for the past two years.

REUBEN B. CHRISMAN JR., CORAL GABLES—AMA Council on Medical Service and AMA Council on Legislation.

DEWITT C. DAUGHTRY, MIAMI—Elected President of the Council of the Southern Thoracic Surgical Association.

JOHNSTON L. CHERESKIN, SARASOTA—Received silver certificate signifying 25 years' continuous affiliation with the American College of Gastroenterology in October 1961.

KENNETH PHILLIPS, MIAMI—Received silver certificate signifying 25 years' continuous affiliation with the American College of Gastroenterology in October 1961.

KENNETH S. WHITMER, MIAMI—Elected Vice-Chairman of the Section on Ophthalmology of the Southern Medical Association on November 9, 1961.

JAMES R. CHANDLER JR., MIAMI—Elected Vice-Chairman of the Section on Otolaryngology of the Southern Medical Association on November 9, 1961.

CHARLES M. GRAY, TAMPA—Installed as President of the Radiological Society of North America on November 30, 1961.

RICHARD G. ALPER, MIAMI—Elected President of the Alumni Association of the University of Miami School of Medicine on December 18, 1961.

HARVEY BLANK, MIAMI—Appointed to AMA Committee on Cosmetics for 1962.

CLIFFORD C. SNYDER, CORAL GABLES—Elected President-Elect of the Southeastern Society of Plastic and Reconstructive Surgeons in June 1961.

C. HOWARD McDEVITT JR., CORAL GABLES—Elected President of the American Medical Golf Association.

CHARLES K. DONEGAN, ST. PETERSBURG—Elected President of the American Society of Internal Medicine.

Dr. Stewart: "The Board of Governors has presented to you a resolution recommending the award of a Certificate of Merit to one of our distinguished physicians. Only two Certificates of Merit have been awarded during the history of the Florida Medical Association. Due to the fact that the proposed recipient of this award cannot be here on Sunday for the Second House of Delegates, the Speaker would like to suspend the rules and read the resolution of the Board of Governors."

On motion duly seconded and carried, the First House of Delegates voted to hear the resolution of the Board of Governors, which was read by Dr. Samuel M. Day:

WHEREAS, William Monroe Rowlett, M.D., of Tampa, a distinguished life member of the Florida Medical Association, has rendered outstanding service to the medical profession, to the public, and to the Association throughout the fifty-two years of his membership, and is therefore worthy of the Association's highest tribute, and

WHEREAS, This eminent physician, born in Collierville, Tennessee, on May 17, 1884, the son of William Monroe and Eleanor Swift Rowlett, attended Manatee County High School in Bradenton, received the Bachelor of Science degree from the University of Florida in 1906 and the degree of Doctor of Medicine from Emory University School of Medicine in 1909, served an internship and a residency at the Presbyterian Hospital in Atlanta in 1909 and 1910 and later engaged in postgraduate study at Harvard Medical School, and

WHEREAS, This youthful practitioner of medicine entered private practice in Tampa in 1910, was the following year elected secretary of the Hillsborough County Medical Society and thereafter embarked on a dramatic episode culminating in 1921 in which he played a major role in exposing the fraudulent diploma mills and license racket existing in Florida at that time, receiving citations and awards from several institutions including the University of Florida and from the American Federation of Boards of Medical Examination, and

WHEREAS, For more than half a century this faithful servant of Medicine has rendered distinguished service as head of the section on gynecology of the Tampa General Hospital and Clara Frye Memorial Hospital from 1925 to 1948 and of St. Joseph's Hospital from 1938 to 1951; as secretary-treasurer of the Florida State Board of Medical Examiners from 1917 to 1944, giving leadership in drafting and fostering the Medical Practice Act and in creating the Component Board of Medical Examiners in 1921; as president of the Hillsborough County Medical Association in 1949, in addition to the earlier post of secretary and also the chairmanship of several committees including the legislative committee from 1950 to 1960; as president of the Florida Medical Association in 1933, a member of the Board of Governors from 1932 to 1934 and in 1945 and 1951, and chairman of the Legislative and Public Policy Committee from 1921 to 1926; as an organizer and a director of Florida Blue Shield and Blue Cross; as a member of the Advisory Committee to the J. Hillis Miller Health Center of the

University of Florida; as Florida's representative in the American Association of Medical Colleges from 1934 to 1944; as medical director of the National Youth Administration in Florida in 1937; as a member of the state executive committee of the American College of Surgeons; as special investigator of European medical colleges in 1935; as a member of the Volunteer Medical Service Corps in World War I and as district chairman of Procurement and Assignment Service in World War II; and as a charter member of the South Atlantic Association of Obstetricians and Gynecologists and of the Southeastern Surgical Congress and a member of the American Medical Association and the Southern Medical Association, and

WHEREAS, This distinguished doctor has had a prominent role in community affairs, which included serving as president of the Tampa Kiwanis Club, as president of the Hillsborough County Boy Scouts, as potentate of Egypt Temple A.A.O.N.M.S., and as chairman for thirty years of the City of Tampa Park Board with the city's largest park bearing his name, and has been the recipient of many honors from his college days of football fame and scholastic attainment when he received the University of Florida Junior-Senior Medal in 1905, through the war years of the forties when he was awarded a Certificate of Appreciation by President Franklin D. Roosevelt and a Selective Service Medal by the Congress of the United States, on down to more recent years when he received a Certificate of Merit from the University of Florida in 1953 and a Certificate of Merit from Egypt Temple A.A.O.N.M.S. in 1957 and in 1960 was elected to membership in the University of Florida Alumni Association's Grand Old Guard; therefore be it

RESOLVED, That the Certificate of Merit, the Association's highest honor, be awarded to this exemplary member of the Association, devoted servant of the medical profession and the public, and outstanding citizen of Florida, in recognition of his unselfish service, unflagging zeal and generous expenditure of time and effort at great personal sacrifice on behalf of the Association and the profession and in the interest of the public welfare.

Dr. Day: "Mr. Speaker, I move the adoption of this resolution."

Motion seconded by several members of the House and carried unanimously by voice vote.

The Speaker requested Dr. Madison R. Pope and Dr. Irving M. Essrig to escort Dr. Rowlett to the rostrum.

Dr. Stewart: "Dr. Rowlett, it gives me great pleasure to present to you the third Florida Medical Association Certificate of Merit."

Dr. Rowlett: "Thank you. President Harvard, Officers of the Association, and House of Delegates, I thank you from the depth of my heart for this lovely Certificate of Merit that you have seen fit to bestow upon me. As I look at it, my heart is filled with feelings of mixed emotion—first a feeling of elation that I should have been chosen from a field of so many others who have worked for the elevation of the practice of Medicine in Florida; then a feeling of sadness comes over me when I realize that those other faithful ones who have done so much to raise the standard of the practice of Medicine in Florida have answered the roll call for the last time."

Dr. Rowlett gave an interesting review of the early days of medical practice and medical licensure in Florida and concluded his acceptance by saying, "When that great American patriot, Nathan Hale, was captured by the British, just before being executed he said: 'I am sorry I have only one life to give for my country.' My friends, I am sorry I have only one life to give to my profession. Thank you."

Dr. Harvard: "For the second year, the Community Service Award of the A. H. Robins Company is being presented to honor a Florida physician judged by his colleagues to have made a significant contribution to civic activities by manifesting widespread interest and participation in public affairs. The recipient of this year's annual award is Dr. William Daniel Sugg of Bradenton, who was chosen by the Board of Governors of the Florida Medical Association from nominees submitted by the component county medical societies.

Dr. Sugg, a physician's son, was born in Brentwood, Tennessee, on July 16, 1897, and received his academic and professional training in his native state. He attended Battle Ground Academy at Franklin, and Vanderbilt University awarded him the Bachelor of Arts degree in 1919 and the degree of Doctor of Medicine in 1923. After serving an internship at Nashville General Hospital and a residency at St. Thomas Hospital in Nashville, he engaged in graduate study at the University of Pennsylvania School of Medicine, where he received the degree of Master of Medical Science in Surgery in 1929. A veteran of World War I, he served in the Marine Corps as a cadet flyer.

In 1930, Dr. Sugg entered the private practice of medicine in Bradenton and for more than three decades has had a prominent role in the life of the community. He is a member of the Manatee County Medical Society, having served as president and as secretary several times and as chairman of many important committees. He also holds membership in the Florida Medical Association, American Medical Association, Seaboard Surgeons, Southeastern Surgical Congress and International College of Surgeons. In addition, he is a fellow of the American College of Surgeons and a diplomate of the American Board of Surgery.

Across the years Dr. Sugg's community activities have been legion. The impressive record since 1934 in the Bradenton Chamber of Commerce includes the chairmanship of many committees, service as president from 1947 to 1950 and membership on the board of directors for a number of years. A member of the Bradenton Kiwanis Club since 1930, Dr. Sugg has served as president, twice as vice president, several years as a director and repeatedly as chairman of important committees. He was a member of the Citizens Committee on the Ringling Museum of Art which was appointed by the State Board of Control in May 1957 and was one of the original members of the Museum's board of trustees appointed by the Governor in July 1959, a post he continues to hold.

When the Junior Woman's Club asked Dr. Sugg to name a project for it to promote, he suggested a Little Theatre movement. With his enthusiastic support, this endeavor resulted in the organization of the Manatee Players and eventually the acquisition of the present theatre building. In 1949 he was elected president of the Players, an office he held for the next seven years, and in several productions he has been a member of the cast. From 1948 to 1950, which annually organized a week-long community celebration. This group became The Conquistadores, of which he was a charter member and the first president in 1951.

In 1946, Dr. Sugg was founder of the Manatee County Historical Society and served as its first vice president. When this organization sponsored the first De Soto Celebration two years later, he represented the group on the committee which staged the parade and pageant. He also was a founder of the South Florida Museum, has served as its president for 14 years and has donated and loaned many valuable items. In addition, he was a founder of the Society for the Prevention of Cruelty to Animals and has been its president since its organization in 1957.

Among the many movements championed by Dr. Sugg for the betterment of the community were slum clearance and creation of the Housing Authority, on which he served. He helped put through the first project, new homes for low income Negro families, which led to a recently completed large companion project for low income white families, know as "W. D. Sugg Dwellings."

A charter member and one of the originators of the Florida West Coast Symphony Orchestra in 1949, Dr. Sugg was made an honorary life member three seasons ago and is now serving as president. He is a past president of the Bradenton Civic Music Association and also of the Bradenton Country Club. Representing Manatee County, he became an initial member of the board of trustees of New College, Inc., and serves as a member of the executive committee and the site, architectural, plant development and finance committees. Since its inception in 1953, he has served on the board of trustees of The Edward E. & Lillian H. Bishop Foundation, recommending grants for medical and nursing students. Also, he has served on the advisory committee of The Huntington-Bishop Foundation since its establishment in 1952, participating in all donations made and scholarships granted to various educational institutions.

The De Soto National Monument is located on a site on the Manatee River where De Soto actually landed on continental North America, as determined by the Smithsonian Institution. This property was owned by Dr. Sugg and Dr. L. W. Blake, who donated a 25 acre tract to the United States Department of the Interior so that a national monument could be permanently established there.

Dr. Sugg has pioneered in the work of the American Cancer Society in Florida, serving several times as president of the Manatee County Unit, on the state board of directors for more than a decade, on several divisional committees, and as medical director of the Manatee County Unit and of the Manatee County Tumor Clinic which he organized. He received the National Divisional Award for distinguished service in October 1955. He was also one of three leading citizens who initiated and followed through with the present Manatee Veterans Memorial Hospital. He was chief of staff from 1952 to 1954 and for eight years was chief of surgery, has been chairman of the credentials committee since 1956 and is chairman of the staff's building committee for an addition to the hospital. In 1958, a large complete surgical suite and spacious recovery rooms were donated and built by friends of Dr. Sugg and dedicated to him.

Dr. Harvard requested Dr. Sugg to come forward and receive the award.

Dr. Harvard: "Dr. Sugg, it gives me great pleasure to present you with this plaque."

Dr. Sugg: "This comes as an absolute and total surprise to me. I am totally flabbergasted. I had no word of it whatsoever. It is totally undeserved. I do want to express my very deep appreciation to your committee. I am sure that some of my colleagues have dug up a great many things that should not have been dug up about my various activities over the years. I am very grateful to them.

"I would like to take this opportunity to say to you something that I have said to young men entering medical practice. We are having to stand up—we are going to have to call on friends if we keep our place in the capitalistic world, and I know that when you take part in civic affairs, frequently it is at the expense of your leisure hours you need for exercise. It is hard for those of us in medical and surgical practice these days to keep up with the tremendous and intricate advances of our own science. We have to run like everything to stand still, but somehow, if all of us could make ourselves a part of the many cultural, educational, religious and even political activities of our communities, be leading citizens as our colleagues are in some of the Spanish countries, but not go so far perhaps politically, I think we would get more help from those who must help us if we are to maintain our place as independent practitioners of our art."

Dr. Stewart: "Gentlemen, the time has come to honor our President. To be a President of this Association, a man has to work a long time and work hard. I think it is right to say that the Presidential Address is the culmination of a man's whole career as President of this Association. Any President of the Florida Medical Association does not need an introduction to a medical audience in Florida; therefore the Speaker will only say one thing. I asked Carnes a little while ago what he liked best in his thirty years of general practice in Brooksville, Florida. He said, 'Well, Joe, I think what I like best is people and the practice of medicine.' Gentlemen, your President, Dr. S. Carnes Harvard."

As the delegates gave Dr. Harvard a standing ovation, he approached the podium.

(The complete text of the presidential address begins on page 21).

The President's Address was assigned to Reference Committee No. III.

Dr. Stewart announced the personnel of Reference Committees as follows:

I. HEALTH AND EDUCATION
- William J. Dean, Chairman
- Charles H. Gilliland
- Samuel G. Hibbs
- W. Dean Steward
- Walter W. Sackett Jr.

II. PUBLIC POLICY
- Charles R. Sias, Chairman
- Robert J. Brown
- James A. Winslow Jr.
- James F. Cooney
- Willard L. Fitzgerald

III. FINANCE AND ADMINISTRATION
- Edward Jelks, Chairman
- George S. Palmer

Edward L. Cole Jr.
Robert L. Tolle
Nelson Zivitz

IV. LEGISLATION AND MISCELLANEOUS
Edward W. Cullipher, Chairman
Emmet F. Ferguson Jr.
James L. Bradley
Madison R. Pope
Clifford C. Snyder

The Council and Committee reports and resolutions were referred as published in the Handbook, together with supplemental reports and additional resolutions as presented in the Delegates' packets.

Dr. Stewart: "Dr. Walter C. Payne Sr., has asked the privilege of the floor to say a word in memory of our late Past President, Herbert L. Bryans."

Dr. Payne presented the following resolution, submitted by the Escambia County Medical Society, as a memorial to Dr. Bryans:

In the passing of our beloved Herbert Bryans on June 8, 1961, the Florida Medical Association lost one of its most distinguished veteran members. In a profession dedicated to the principle of service to others, few of us have been able to approach the high standard of devotion to that ideal established by Herbert.

Dr. Bryans materially contributed to our great profession as President of the Escambia County Medical Society and the Florida Medical Association and for many years as a Delegate to the American Medical Association. He had not missed a meeting of the Florida Medical Association in thirty-six years, which probably is a record for attendance. He will long be remembered as President of the Florida State Board of Health for a period of 16 years, a term unequaled by that of any other holder of that position. He was a founder and President of the Gulf Coast Clinical Society. He took a leading part in the establishment of the first school of practical nursing in Florida and in 1961 was awarded a certificate of merit by the Escambia County Medical Society for his outstanding work in the field of Nursing Education. Among other community activities, too numerous to name, he served for many years as a member of the Escambia County Board of School Trustees and was chairman of the Board for the last few years of his life.

A man of becoming modesty and temperate habits, with an intense interest in serving others, he walked humbly before his Maker. Because he so fully committed himself to a useful life, he will be sorely missed not only by his local Society but throughout the state and national medical circles where he was held in such high esteem.

THEREFORE, BE IT RESOLVED, That we record this memorial as an inadequate expression of our esteem and affection, but as a perpetual reminder of a life so exemplary in character. We direct that this memorial be inscribed in our records and that a copy be sent to Mrs. Bryans and the family with the profound sympathy of all members of the Florida Medical Association.

Dr. Stewart: "This resolution will be referred to Reference Committee No. III."

The Speaker recognized the Secretary-Treasurer, Dr. Day, who read a telegram from the Chairman of the Board of Directors of the American Political Action Committee, advising that Sunday, June 24 will be AMPAC day in Chicago, and inviting physicians to attend the political education and action session from 9:30 a.m. until noon.

The Speaker then asked if there were any additional supplemental reports or resolutions.

A supplemental report of the Judicial Council, approved by the Board of Governors, was presented. This report was in regard to two requests for separate component county medical societies and was referred to Reference Committee No. III.

An amendment to the By-Laws in regard to composition of the Judicial Council was presented by the Board of Governors and referred to Reference Committee No. III.

An amendment to the By-Laws concerning seating of delegates, presented by the Board of Governors, was referred to Reference Committee No. III.

Dr. Clifford C. Snyder presented a supplemental report of the Committee on Archives. This supplemental report was referred to Reference Committee No. III.

Dr. James T. Cook Jr., member of the Blue Shield Board of Directors, presented a resolution submitted by Blue Shield and concerning multiple types of service contracts. Number 62-27 was assigned this resolution, and it was referred to Reference Committee No. IV.

Dr. Russell B. Carson, President of Blue Shield submitted the Annual Report of Blue Shield of Florida, Inc. to the Florida Medical Association. This report was assigned No. 62-28 and referred to Reference Committee No. IV.

Dr. Walter W. Sackett Jr. of Dade introduced a resolution commending the medical doctors of Saskatchewan Province, Canada and stated that this resolution did not emanate from the Dade County Medical Association, but was presented with the approval of the Dade delegation. This resolution was assigned No. 62-29 and referred to Reference Committee No. II.

Dr. Walter H. Winchester of Pinellas introduced a resolution concerning nonparticipation in socialized medicine. This resolution was assigned No. 62-30 and referred to Reference Committee No. II.

Dr. Walter E. Murphree of Alachua introduced a resolution concerning nonparticipation in socialized medicine. This resolution was assigned No. 62-31 and referred to Reference Committee No. II.

Dr. Reddin Britt of St. Johns introduced a resolution endorsing nonparticipation in a socialistic system of medical care, and this resolution

was assigned No. 62-32 and referred to Reference Committee No. II.

Dr. William W. Thompson of Walton-Okaloosa-Santa Rosa introduced a resolution concerning disciplinary action. This resolution was assigned No. 62-33 and referred to Reference Committee No. III.

Dr. Miles J. Bielek of Broward called attention to the report of the Committee on Public Health and introduced a resolution in regard to this report. This resolution was assigned to Reference Committee No. I and given No. 62-34.

Dr. Anthony C. Galluccio of Broward introduced a resolution concerning the cost of hospital care. This resolution was assigned No. 62-35 and referred to Reference Committee No. I.

The Speaker recognized Dr. James L. Anderson of Dade, who stated that Dade County had submitted a resolution concerning the Speaker of the House which appeared neither in the Handbook nor in the Delegates' packets. Dr. Anderson said that the resolution would be forthcoming for presentation to the Reference Committee. This resolution was assigned No. 62-36 and referred to Reference Committee No. III.

Dr. Burns A. Dobbins Jr., Chairman of the Medicare Mediation Committee, introduced Brig. Gen. W. D. Graham, Director of the Office for Dependents' Medical Care and Colonel R. W. Hobson, Chief of the Dental Division. Dr. Dobbins stated that these gentlemen would be present for the Blue Shield Board of Directors meeting and invited the Delegates to stop by and talk with them.

The Speaker announced that the Annual Meeting of Blue Shield of Florida would be held immediately following recess of the House of Delegates.

The Speaker announced that the President's Guest Speaker at the General Session, to be held at 11:30 a.m., Friday, May 11 in the Grand Ballroom, would be The Honorable Durward G. Hall, Doctor of Medicine and Member of the House of Representatives of the United States, whose subject would be "How a Physician Member Views Congress."

The Speaker announced that Princess Caradja would be the Guest Speaker at the Woman's Auxiliary Luncheon in the Medallion Room at 12:30 p.m., May 11. He stated that all members and their wives were invited to attend the luncheon.

President Harvard advised the delegates that Mr. Richard Nelson of the AMA Field Service would be available in the Medallion Room Thursday and Friday afternoons to discuss implementation of legislative programs regarding the King-Anderson Bill with any Delegates or members regarding their county medical societies' programs.

President Harvard then called the Delegates' attention to the President's Memo which was included in their packets.

Dr. Ralph W. Jack was given the privilege of the floor and told the delegates that the Papanicolaou Cancer Research Center would hold open house on Sunday, May 13, following adjournment of the Florida Medical Association Annual Meeting. He advised them that Sunday evening a memorial dinner would be held in honor of Dr. Papanicolaou, who would have celebrated his seventy-ninth birthday on that date. The physicians were invited to attend the open house and memorial dinner.

Dr. Charles R. Sias of Orange, Chairman of Reference Committee No. II, was recognized and stated that the resolution from Broward County, No. 62-34, previously assigned to Reference Committee No. I, was something that was already to be considered by Reference Committee No. II under the recommendations of the Public Health Committee, and also the item referred to on Home Nursing in the Board of Governors report has been referred to Reference Committee No. II. Dr. Sias was of the opinion that this resolution should also be considered by Reference Committee No. II. The Speaker concurred with Dr. Sias, and Resolution 62-34 was placed for consideration by Reference Committee No. II. There were no objections.

The House of Delegates recessed at 1:20 p.m. to reconvene on Sunday, May 13, 1962 at 9:30 a.m.

Second House of Delegates

The House of Delegates reconvened at 9:30 a.m. on Sunday, May 13, 1962 in the Grand Ballroom of the Americana Hotel, Bal Harbour, Miami Beach, with Dr. Joseph S. Stewart, Speaker of the House, presiding.

Dr. Ralph M. Overstreet Jr., Chairman of the Credentials Committee, reported that 145 delegates were officially seated, and constituted a quorum.

Delegates

ALACHUA—Henry J. Babers Jr., Charles H. Gilliland, Walter E. Murphree, Peter F. Regan III
BAY—John J. Benton, Henry C. Smallwood
BREVARD—Jack T. Bechtel, Willard H. H. Bennett, Theodore J. Kaminski, Allen E. Kuester
BROWARD—Miles J. Bielek, Russell B. Carson, Frederick W. Fisher, Richard L. Foster, Anthony C. Galluccio, Walter J. Glenn Jr., David J. Lehman Jr., John H. Mickley, Robert U. Moersch, Lees M. Schadel Jr., W. Dotson Wells, Scottie J. Wilson
CHARLOTTE—Carl N. Reilly
CLAY—Thomas L. Glennan
COLLIER—*(Absent—William J. Bailey)*
COLUMBIA—Harry S. Howell
DADE—Julius Alexander, Seymour L. Alterman, James L. Anderson, Edward R. Annis, William G. Aten Jr., George S. Baldry, Turner E. Cato, Francis N. Cooke, Vincent P. Corso, Richard C. Clay, Jack Q. Cleveland, Edward W. Cullipher, DeWitt C. Daughtry, H. Clinton Davis, Robert F. Dickey, L. Washington Dowlen, Franklin J. Evans, Kermit H. Gates, W. Tracy Haverfield, James J. Hutson, Paul S. Jarrett, Walter C. Jones, John B. Liebler, Robert P. Keiser, David Kirsh, Donald F. Marion, John D. Milton, Wesley S. Nock, Samuel W. Page Jr., Warren W. Quillian, James G. Robertson, Hunter B. Rogers, Walter W. Sackett Jr., William A. Shaver, William M. Straight, Harrison A. Walker, Corren P. Youmans *(Absent—Rufus K. Broadaway, Victor D. Dembrow, Willard L. Fitzgerald, Richard M. Fleming, Maurice M. Greenfield, Morton M. Halpern, Harold Rand, Clifford C. Snyder, Nelson Zivitz)*
DESOTO-HARDEE-GLADES—Gordon H. McSwain
DUVAL—Sam C. Atkinson, Robert J. Brown, Charles H. Burke, Hugh A. Carithers, Clyde M. Collins, James E. Cousar III, Thomas S. Edwards, Emmet F. Ferguson Jr., A. Judson Graves, Karl B. Hanson, Thomas M. Irwin, Edward Jelks, Joseph J. Lowenthal, Harry W. Reinstine Jr., Ashbel C. Williams
ESCAMBIA—Alpheus T. Kennedy, Sidney G. Kennedy Jr., John M. Packard, Walter C. Payne Sr., Joseph L. Rubel
FRANKLIN-GULF—John W. Hendrix
HIGHLANDS—Donald C. Hartwell
HILLSBOROUGH—Herschel G. Cole, Thomas W. Dorr, Irving M. Essrig, H. Phillip Hampton, Richard S. Hodes, Eugene B. Maxwell, David R. Murphey Jr., James N. Patterson, Madison R. Pope, Marshall E. Smith, James A. Winslow Jr. *(Absent—Samuel G. Hibbs)*
INDIAN RIVER—Erasmus B. Hardee
JACKSON-CALHOUN—Richard H. Schulz
LAKE—Frederick C. Andrews, J. Basil Hall
LEE-HENDRY—Fred D. Bartleson *(Absent—James L. Bradley)*
LEON - GADSDEN - LIBERTY - WAKULLA - JEFFERSON—Nelson H. Kraeft, George S. Palmer, Stuart C. Smith, Robert N. Webster
MADISON—Thomas G. Bouland Jr.
MANATEE—Irving E. Hall Jr., Joseph F. P. Newhall Jr.
MARION—Henry L. Harrell, Herbert M. Webb Jr.
MONROE—Ralph Herz
NASSAU—Cecil B. Brewton
ORANGE—Chas. J. Collins, Norman F. Coulter, Harry H. Ferran, Truett H. Frazier, Lawrence H. Kingsbury, Louis C. Murray, Roger E. Phillips, Charles R. Sias, W. Dean Steward, Miles W. Thomley, Robert L. Tolle
PALM BEACH—Willard F. Ande, James F. Cooney, C. Jennings Derrick, Philip O. Lichtblau, Samuel A. Manalan, Ralph M. Overstreet Jr., Cecil M. Peek *(Absent—Edwin W. Brown, Walter R. Newbern)*
PASCO-HERNANDO-CITRUS—Gail M. Osterhout
PINELLAS—Clyde O. Anderson, Edward L. Cole Jr., William J. Dean, Charles K. Donegan, William H. Keeler III, Francis H. Langley, James K. McCorkle, Norval M. Marr Jr., William G. Mason, Walter H. Winchester, Rowland E. Wood *(Absent—Chas. L. Farrington, Earl R. Fox)*
POLK—John E. Daughtrey, Marion W. Hester, Albert G. King Jr., Charles Larsen Jr., Willard E. Manry Jr., Arthur J. Moseley Jr.
PUTNAM—Grover C. Collins
ST. JOHNS—Reddin Britt
ST. LUCIE-OKEECHOBEE-MARTIN—John M. Gunsolus, Howard C. McDermid
SARASOTA—John M. Butcher, Karl R. Rolls, Melvin M. Simmons, Millard B. White
SEMINOLE—Vann Parker
SUWANNEE-HAMILTON-LAFAYETTE—Hugo F. Sotolongo
TAYLOR *(Absent—Charles R. Wiley)*
VOLUSIA—John J. Cheleden, William H. Eyster Jr., William H. Harrison Jr., Robert L. Stevenson, Russell L. Welsh
WALTON-OKALOOSA—SANTA ROSA—William W. Thompson *(Absent—John W. Reece)*
WASHINGTON-HOLMES—*(Absent—Walter H. Shehee)*
COUNCIL ON SPECIALTY MEDICINE—William H. Anderson Jr., James D. Beeson, Jack H. Bowen, James T. Cook Jr., John P. Ferrell, Christian Keedy, Jack A. MaCris, Bernard L. N. Morgan, Wendell J. Newcomb, Rodman Shippen, William A. Van Nortwick, Scheffel H. Wright *(Absent—Harry M. Edwards, John B. Miale, James R. Sory)*
OFFICERS AND EX-OFFICIO MEMBERS—Reuben B. Chrisman Jr., Samuel M. Day, Burns A. Dobbins Jr., S. Carnes Harvard, Francis T. Holland, Meredith Mallory, Eugene G. Peek Jr., Ralph S. Sappenfield, Joseph S. Stewart, Leo M. Wachtel, Robert E. Zellner

Dr. Harvard introduced Laurence F. Lee Jr., Chairman of the Florida Health Insurance Council.

Mr. Lee addressed the Delegates, informing them that the number of persons holding medical care insurance is increasing. He commended the physicians on the splendid work that is being done through the review committees established throughout the state. He stated that the review committees in Florida are outstanding in the nation, and encouraged the physicians of Florida to utilize these committees. Mr. Lee concluded his address by saying, "It is a real privilege to be with you, and I want to congratulate you for the job you are doing."

Dr. Stewart welcomed the members of the press who were present at the Second Meeting of the House of Delegates. He then extended thanks to the Reference Committees for their diligent work.

The Speaker requested Dr. William J. Dean, Chairman of Reference Committee No. 1, to come to the rostrum and present the report of his Committee.

REPORT OF REFERENCE COMMITTEE No. 1

Health and Education

Dr. William J. Dean: "Mr. Speaker and Members of the House of Delegates: Your Reference Committee gave careful consideration to items referred to it and makes the following report:

"The report of the Council on Medical Education and Hospitals is approved as printed in the Handbook, and the supplemental report is approved. This Committee wishes to submit the following recommendations regarding the report of the Committee on Medical Schools: Discussion was held and representatives of the J. Hillis Miller Health Center and the Alachua County Medical Society are in agreement concerning the need for admission of nonemergency indigent patients to the University Hospital for teaching purposes. It is strongly recommended that the Florida Medical Association take appropriate steps to encourage the state legislature to set up a means by which indigent patients from all the counties of Florida may be admitted to the University of Florida Hospital.

"Mr. Speaker, I move the adoption of this portion of the report with the above recommendation."

Dr. H. Phillip Hampton of Hillsborough moved that the words "referred by their physicians to the University Hospital" replacing "admitted to the University of Florida Hospital," be added to the recommendation of the Reference Committee.

Dr. Walter E. Murphree of Alachua felt that by amending the recommendation the purpose of the recommendation would be lost; he stated that only patients with some source of payment may be admitted to the teaching hospital, and the hospital needs a larger budget to enable the staff to admit some teaching cases.

Dr. Ashbel C. Williams of Duval spoke in favor of the amendment.

Dr. Peter F. Regan III of Alachua emphasized that the physicians of Alachua County are desirous of permissive legislation which would allow them to take patients who are valuable teaching patients.

Dr. Hampton's amendment to the recommendation of the Reference Committee was seconded and carried.

Motion by Dr. Dean to accept the report as amended carried.

Council on Medical Education and Hospitals

EDWARD W. CULLIPHER, *Chairman*

Council:

There has been no meeting of the full Council so far this year. Correspondence indicates there have been no pressing problems presented to this Council other than the report from the Committee on Medical Schools.

Committees:

1. Hospitals
2. Internships and Residencies
3. Physician Placement

The Committee since its establishment in 1960 under the Association's revised By-Laws has carried out its activities in two areas:

(1) Along with the deans of the two Florida medical schools or their representatives, the Committee has served as advisory committee to the State Board of Health for the Medical Student Scholarship Program. In this continuing capacity, the Committee reviewed scholarship applications, selected recipients, and advised upon placement and any other matters affecting this program.

(2) The Committee established and continues to direct the policies of the Association's physician placement service, which is administered by the executive office. The Committee has remained available at all times for needed policy determinations. During the past year, the placement service provided a wide variety of services to an average at all times of more than 100 physicians seeking locations, and to an average of more than 50 communities, medical groups and individual physicians seeking associates.

It is anticipated that the Committee will continue its major activities in these two directions.

4. Medical Schools

Recommendations of Council for House of Delegates' approval:

The Committee on Internships and Residencies is aware of the difficulty experienced by hospitals not affiliated with universities in recruiting house staff. By basing their programs on learning opportunity rather than services to the hospital, an increasing number of superior doctors in training should be attracted to Florida. Ideas for development and promotion of programs might well be cleared through a state committee to the mutual advantage of all. (Committee recommendation—not considered by full Council).

It is strongly recommended that the Florida Medical Association take appropriate steps to encourage the state legislature to set up a means by which indigent patients from all the counties of Florida may be referred by their physicians to the University of Florida Hospital.

Supplemental Report of Council on Medical Education and Hospitals

EDWARD W. CULLIPHER, *Chairman*

The following summary of activities of two Committees were omitted from the Handbook:

1. Committee on Internships and Residencies

The Committee published a brochure for senior medical students and hospital residents which we believed would increase interest and the number of applicants to Florida hospitals. Approximately 7,000 copies of "Florida's Medical Climate" were mailed individually to the Seniors. We are grateful to members of the Auxiliary of the Duval County Medical Society as well as to the staff of the headquarters office for aid in this endeavor. The hospitals of Florida which have approved interns or residents participated in the cost of this project. Extra copies of the brochure were used by some of the hospitals in their own mailing. A follow-up investigation to determine if this effort was worth while is contemplated.

2. Committee on Medical Schools

Our Committee has held no formal meeting. The problem of relations between the Alachua County Medical Society and the University of Florida College of Medicine has been the subject of much correspondence between your Chairman and the two parties. They have made exceptionally good progress by many meetings and discussions. The only remaining problem which cannot be solved at that local level is the admission of purely charity patients to the J. Hillis Miller Health Center on a nonemergency basis. Since this requires legislative action from the State of Florida, we recommend it be brought to the attention of the Florida Medical Association.

As directed by the Executive Committee of the Board of Governors of the Florida Medical Association, the problem of closer liaison with the Florida Hospital Association has been initiated by correspondence. It has indicated an interest and willingness to cooperate and further progress is expected in this field.

"The report of the Scientific Council is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report with commendation to Dr. Thad Moseley for his outstanding work as Editor of The Journal of the Florida Medical Association and in planning the scientific programs for the Annual Meeting."

No discussion; no objections, motion carried.

Scientific Council

THAD MOSELEY, *Chairman*

Council:

Within the past year, The Journal has undergone a complete revision as to editorial staff, information presentation and composition. All members of the editorial staff have worked faithfully to perform these functions, which have been accomplished with a minimum of comment.

The Committee on Scientific Work has compiled the program for the scientific sessions of the 1962 Annual Meeting, again presenting hobby displays and scientific exhibits. The Committee has functioned smoothly and all members have cooperated.

The Committee on Postgraduate Education continues to compile information which will be of value in the future in selection of speakers and planning of formal program presentations. A questionnaire has been forwarded to all Association members concerning the desire for future postgraduate programs and the planning of future scientific presentations at the Annual Meeting. All members of this Committee have worked well through the year.

The Committee on Research has continued to consider all applications for grants and to give information to the Florida Medical Foundation concerning them. Ten applications have been received; eight reviewed; two are pending, and eight have been finalized.

COMMITTEES:

1. The Journal and Other Publications
2. Postgraduate Education
3. Research
4. Scientific Work

"The report of the Council on Specialty Medicine is approved as printed in the Handbook.

"After discussion, it is the consensus of this Committee that all parties favor the adoption of the California Relative Value Study as a guide for formulating a Florida Medical Association Relative Value Study. It is recommended that adequate provision be made to cover all phases of medicine on a fee-for-service basis.

"Mr. Speaker, I move the adoption of this portion of the report with the above recommendation."

No discussion; no objections, motion carried.

Council on Specialty Medicine

SCHEFFEL H. WRIGHT, *Chairman*

Council:

The Council on Specialty Medicine met upon two occasions in conjunction with the Fee Schedule Committee on November 12, 1961, and January 12, 1962, in Jacksonville. A majority of all specialty groups was well represented at each meeting. The Chairman of the Council met with the Board of Governors at its meeting at Grand Bahama with a specific request as to activities and functions of this Council and no specific problems were referred to it. A thorough review of the Charter and By-Laws of the Florida Medical Association revealed that this Council is only specifically charged as an advisory committee to the Fee Schedule Committee and to initiate ideas and projects for consideration of the Executive Committee. It is apparently an accepted function of this Council that it should provide a liaison between the Association and specialty organizations within the state and a vehicle through which various medical specialties may represent their fee schedule, but these latter functions are not specifically spelled out in the duties of the committee.

The major portion of the time and effort of the Council during the past year was devoted to discussion of fee schedules as they related to the specialty groups. By majority action the Council specifically advised that the Fee Schedule Committee should not negotiate a fee schedule with the representatives of industry. The Council approved and urged the adoption of the California relative value scale of 1960 as a guide for consideration and negotiation of any fee schedule by the Florida Medical Association, and that any fee schedule adopted should be regarded as an average fee schedule and not administered as a maximum fee schedule. It also recommended to the Fee Schedule Committee of the Florida Medical Association that the Florida Industrial Commission change the administration of the present fee schedule so that it will be an average or suggested fee schedule and a guide to the Commission and not administered as a maximum fee schedule and it further recommended that this be done immediately. Subsequent to the initial action the Council advised the Fee Schedule Committee that in case negotiating was done either with the Industrial Commission or with industry, the best personnel be obtained from both the Florida Medical Association and The Florida Bar and that an expert negotiator be employed to represent the Fee Schedule Committee. The

Council also recommended that before any fee schedule with the Florida Industrial Commission be made final, such fee schedule be presented to the Specialty Council for action by its individual committees before such a fee schedule was adopted. The Council also recommended to the Committee of Seventeen the adoption by Blue Shield of the 1960 California Relative Value Study and that it adopt if feasible a deductible type service contract. It was also recommended that the 1960 California Relative Value Study be used by Vocational Rehabilitation, the Crippled Children's Commission, Care of the Blind, and the Veterans Administration as a guide for remuneration of medical services.

A serious attempt was made to define the specialist in medicine and a formula for his proper remuneration, but this work was not accomplished.

COMMITTEES:

1. Anesthesiology
2. Dermatology
3. General Practice — Recommendations (Committee recommendations—not considered by full Council): The Florida Academy of General Practice believes that the latest action was wise and just, and that a dual fee schedule would be unworkable, the classification of specialist limited to Board Certification too narrow; the dual fee schedule under any classification potientially dangerous to organized medicine, in that it will cause dissension within our ranks, almost splitting the profession in half. We also believe in a fee for service rendered. We urge the House of Delegates to assist the majority of voting members of the Council on Specialty Medicine to uphold this decision, and avert further dissension on the Council because of this one item; it has almost stopped all other work by the Council.
4. Internal Medicine — Recommendations (Committee recommendations—not considered by full Council): It is felt that this Council is a very worth while forum for coordinating the activities and opinions of the various specialty organizations of the Florida Medical Association, and we appreciate the recognition of the Florida Society of Internal Medicine as the representative of the Internists of the State of Florida. We recommend that the composition of this Council in the future be by the election of the best qualified and interested member of the component society with a staggering of terms of office to provide continuity of activities of this Council.
5. Neurosurgery
6. Obstetrics and Gynecology
7. Ophthalmology and Otolaryngology—Recommendations (Committee recommendations—not considered by full Council): It is recommended that the California Relative Value Studies of 1960 be adopted and used as a guide in determining Workmen's Compensation Fees.
8. Orthopedics
9. Pathology
10. Pediatrics
11. Plastic Surgery—Recommendation (Committee recommendation—not considered by full Council): That the Committee be continued with some continuity of membership from year to year.
12. Psychiatry
13. Radiology
14. Surgery
15. Urology

Recommendations of Council for House of Delegates' approval:

The members of the Council feel that this Council is a worth while forum which should attempt to coordinate and correlate the activities of the various specialty societies in Florida with the activities of the Florida Medical Association. These activities should include the scientific as well as economic goals of the various specialty societies and the Florida Medical Association.

The Council urges the adoption by the House of Delegates of the amendment to the By-Laws pertaining to the composition of the Council.

It is recommended that adequate provision be made to cover all phases of medicine on a fee-for-service basis.

"Resolution 62-6, Joint Commission on Accreditation of Hospitals, was considered jointly with Resolution 62-12 and our findings are reported therewith."

"Resolution 62-7, Accreditation of Hospitals —Pathology Departments, is approved as printed in the Handbook with a change in line 3 to read: "the effectiveness of the intern and resident training program of the hospital."

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

Resolution 62-7

Accreditation of Hospitals— Pathology Departments Pinellas County Medical Society

WHEREAS it is known and accepted that the effectiveness of medical care in a general hospital, as well as the effectiveness of the intern and resident training program of the hospital, is reflected in the efficiency of the department of Gross and Clinical Pathology, and

WHEREAS the evaluation of this efficiency should include among others the following factors:

1. The kind and effectiveness of quality control of the Clinical Pathology Department;
2. The relationship of type and numbers of autopsies to the various age groups in the patient population of the hospital, together with the ratio of autopsies to the total number of hospital patients;
3. The degree of utilization of Gross Pathology material in the teaching program; and

WHEREAS the various accrediting agencies for hospitals and training programs appear to rely on a single statistical relationship, namely the gross percentage of autopsies, in making this evaluation of the hospital program; therefore, be it

RESOLVED, That this body recommend to the appropriate committees and agencies that the criteria for evaluation of the Pathology Department in the Accreditation of Hospitals and Hospital Training Programs be restudied and, if necessary, revised to include cognizance of the above noted factors and such other factors as may be found to be significantly related.

"This committee recommends that Resolution 62-12, Joint Commission on Accreditation of Hospitals and Resolution 62-6, Joint Commission on Accreditation of Hospitals be approved as printed in the Handbook. It is further recommended that all policies and decisions of the Joint Commission on Accreditation of Hospitals be subject to review by the appropriate committee of the American Medical Association and that these resolutions be presented to the AMA by our delegates.

"Mr. Speaker, I move the adoption of this portion of the report with the above recommendations."

Resolution 62-6

Joint Commission on Accreditation of Hospitals
Dade County Medical Association

WHEREAS the Joint Commission on Accreditation of Hospitals is a group which, through its activities, controls and dominates the policies of hospitals in this country and indirectly, through this situation, the activities of doctors practicing in these hospitals, and

WHEREAS the Joint Commission on Accreditation of Hospitals remains an independent group, completely outside the umbrella of the American Medical Association, our parent body, and

WHEREAS it is to the best interests of the practicing physicians and the patients of the hospitals involved that this Joint Commission on Accreditation of Hospitals be under the direct control of the American Medical Association; therefore now be it

RESOLVED, That all policies and decisions of the Joint Commission on Accreditation of Hospitals be subject to review by the appropriate committee of the American Medical Association, and that these resolutions be presented to the AMA by our delegates and be it further

RESOLVED, That this Dade County Medical Association exert every effort to see that the Joint Commission on Accreditation of Hospitals become a Commission within the American Medical Association, and that it call upon the Florida Medical Association to proclaim a similar policy, and to recommend that the Florida Medical Association delegates present this or a similar resolution before the House of Delegates of the American Medical Association at its next meeting.

Resolution 62-12

Joint Commission on Accreditation of Hospitals
Jackson-Calhoun County Medical Society

WHEREAS the Joint Commission on Accreditation of Hospitals has evolved from a committee organized by the American College of Surgeons, but has now become an independent body which through its activities largely dominates the policies of the hospitals of the nation, and

WHEREAS we believe it to the best interests of the American public and of the practicing physicians of the nation for such a body to be under the control of the American Medical Association, therefore now be it

RESOLVED, That all policies and decisions of the Joint Commission on Accreditation of Hospitals be subject to review by the appropriate committee of the American Medical Association, and that these resolutions be presented to the AMA by our Delegates and be it further

RESOLVED, That the Jackson-Calhoun County Medical Society Incorporated recommends that the Florida Medical Association initiate efforts to place the Joint Commission on Accreditation of Hospitals under the direct control of the American Medical Association, and be it further

RESOLVED, That this resolution be presented before the American Medical Association House of Delegates at its next meeting.

"Resolution 62-18, Office Laboratory Work, is approved as printed in the Handbook with the following amendment: Paragraph 3, line 6, to be inserted after the word "physician:" "provided the laboratory work is completed not more than 48 hours prior to admission to the hospital, and the hospital is furnished a copy of said laboratory work, attested to by the admitting or attending physician as to its correctness.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion, no objections, motion carried.

Resolution 62-18

Office Laboratory Work
Duval County Medical Society

WHEREAS laboratory medicine is considered the practice of medicine, and

WHEREAS the ruling of the Joint Commission on Accreditation of Hospitals to the effect that "only reports of clinical laboratory work done in laboratories supervised by qualified clinical pathologists should be accepted for hospital in-patients or out-patients," directly and indirectly restricts the practice of medicine by a physician and increases the cost of hospitalization to the patient; be it therefore

RESOLVED, That the Joint Commission on Accreditation of Hospitals be requested to change its hospital admission requirements so that laboratory work performed by a licensed physician on the staff of the hospital or by a technician under his supervision is acceptable when signed by that physician, provided the laboratory work is completed not more than 48 hours prior to admission to the hospital, and the hospital is furnished a copy of said laboratory work, attested to by the admitting or attending physician as to its correctness, or the hospital be requested to omit charges for such work which is primarily for the benefit of hospital records, and be it further

RESOLVED, That the Duval County Medical Society request the Florida Medical Association Delegates to the American Medical Association to seek endorsement of this resolution by that organization.

"Resolution 62-20 is approved as printed in the Handbook with the following recommendations:

1. That the Florida Medical Association take immediate steps to establish better liaison with the American Nursing Association regarding its views on current medical and socio-economic legislation.
2. That closer liaison be established on a state level with the following allied professions and vocations: Dentistry, Law, Medical Assistants, Medical Technicians, Nursing, Pharmacy, Physical Therapy, Veterinary Medicine, and X-Ray Technicians.
3. That these groups be invited to send representatives to the Florida Medical Association Annual Meeting.

"Mr. Speaker, I move the adoption of this portion of the report with the above recommendations."

Dr. Day moved to amend the first recommendation of the Reference Committee, because he did not feel that the Florida Medical Association would be the proper body to establish liaison with the American Nursing Association. Dr. Day moved that "The Florida Medical Association take immediate steps to establish better liaison with the Florida Nursing Association and that the

Florida Medical Association recommend to the American Medical Association that it take immediate steps to establish better liaison with the American Nursing Association" be placed before the words "regarding its views. . ." in the first recommendation.

Amendment to the recommendation seconded and carried.

The motion as amended carried.

Resolution 62-20

Hospital and Paramedical Group Liaison
Dade County Medical Association

WHEREAS the American Hospital Association has by intent, if not by word, approved the King-Anderson bill, and

WHEREAS one local hospital staff presented to the South Florida Hospital Council a resolution calling for cooperation of that organization in the fight against the King-Anderson bill and for closer liaison in the form of reports by its Director back to the hospital staff, and

WHEREAS that resolution met the terse, if not discourteous, fate of a tabling motion, and

WHEREAS there is not a hospital in this community in which the doctors have not had a major part in its founding, growth, and present status, and

WHEREAS the present plight of medicine is due in part to actions by this group and others such as the American Nursing Association, all of whom should be a part of the solid front against socialized medicine; therefore now be it

RESOLVED, That this Dade County Medical Association, through its Committee on Economics, take positive steps toward accomplishing liaison and cooperation with the South Florida Hospital Council and similar paramedical groups, and further be it

RESOLVED, That a similar resolution be presented to the Florida Medical Association to accomplish this same purpose on a state basis, and be it further

RESOLVED, That the Florida Medical Association take immediate steps to establish better liaison with the Florida Nursing Association and that the Florida Medical Association recommend to the American Medical Association that it take immediate steps to establish better liaison with the American Nursing Association regarding its views on current medical and socioeconomic legislation, and be it further

RESOLVED, That closer liaison be established on a state level with the following allied professions and vocations: Dentistry, Law, Medical Assistants, Medical Technicians, Nursing, Pharmacy, Physicial Therapy, Veterinary Medicine, and X-Ray Technicians, and that these groups be invited to send representatives to the Florida Medical Association Annual Meeting.

"Resolution 62-35, Cost of Hospital Care, is approved as submitted by the Broward County Medical Association at the First Meeting of the House of Delegates.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Resolution 62-35

Cost of Hospital Care
Broward County Medical Association

WHEREAS, the cost of hospital care continues to spiral, and is now reaching alarming proportions, and further increases have been postulated, and

WHEREAS, there has been concerted effort by the medical profession to control and attempt to reduce this tendency; therefore be it

RESOLVED, That the Florida Medical Association request that the Council on Hospitals make a study of this problem and bring recommendations whereby the physicians of the State of Florida can be better apprised of these cost trends and the results thereof; and be it further

RESOLVED, That the Florida Medical Association request every physician in the State of Florida to make an effort to control these spiraling costs.

"Mr. Speaker, I move the adoption of the entire report as amended."

No discussion; no objections, motion carried.

REPORT OF REFERENCE COMMITTEE No. II

Public Policy

Dr. Charles R. Sias: "Mr. Speaker and Members of the House of Delegates: Your Reference Committee gave careful consideration to items referred to it and makes the following report:

"The Committee recommends that paragraph 7 of the report of the Council on Allied Professions and Vocations be deleted and that the following be added to paragraph 8: "Hospital services of chiropodists (podiatrists) as defined in Chapter 461, Section 461.01, Florida Statutes, shall be under the supervision and responsibility of a physician or surgeon member of the medical staff of the hospital.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

Council on Allied Professions and Vocations

W. TRACY HAVERFIELD, *Chairman*

Council:

During the past year, the Council has carried out its principal function of maintaining liaison between the Association and the various recognized allied professions and vocations in Florida. As may be expected, there is a wide range of differences in the extent and type of liaison existing with each of the groups. All committees of the Council, however, have worked towards the common objective of improving and strengthening relations in their areas of responsibility. It can be reported that, with only two or three exceptions, progress has been noted. As of this writing, a formal report had not been received from one of the Council's nine committees (Veterinary Medicine).

One of the major questions considered and acted upon by the Council during the year concerned the relations between medicine and podiatry-chiropody. The following two related matters pertaining to this subject were given careful study and consideration:

(1) The American Academy of Orthopaedic Surgeons policy statement with respect to the practice of podiatry in hospitals which had been referred by the 1961 Florida Medical Association House of Delegates to the "appropriate groups" at the discretion of the President of the

Florida Medical Association, who had, in turn, referred the statement to the Council for recommendations. The House of Delegates had directed that the opinions of the two specialty groups most concerned, namely surgery and orthopedic surgery, be sought in formulating recommendations. In compliance with this directive, the Florida Association of General Surgeons and the Florida Orthopedic Society were contacted and both groups expressed opposition to the national policy statement.

(2) The formal application for official recognition as an allied profession or vocation made separately and directly to the Council by the Florida Podiatry Association.

COMMITTEES:

1. Dentistry
2. Law
3. Medical Assistants
4. Medical Technicians
5. Nursing
6. Pharmacy
7. Physical Therapy
8. Veterinary Medicine
8. X-Ray Technicians

Recommendations of Council for House of Delegates' approval:

(Relative to Medical Assistants)

(1) That an increased amount of information concerning medical assistants who are members of Florida Medical Assistants Association be made available to individual physicians.

(2) That the Florida Medical Association provide all possible assistance to the Florida Medical Assistants Association in its efforts to insure the success of the annual meeting of the American Association of Medical Assistants being held in Miami Beach in October 1963.

(3) Adoption of the following resolution:

WHEREAS, The Florida Medical Association has demonstrated interest in and provided all possible active support to the Florida Medical Assistants Association; and

WHEREAS, The American Medical Association has formally commended the objectives of the American Association of Medical Assistants, of which the state organization is a component; and

WHEREAS, The goals of these affiliated groups on all levels are identical in inspiring their members to render honest, loyal and more efficient service to the medical profession and the public, and to cooperate with the profession in improving public relations; and

WHEREAS, These goals are entirely educational and noneconomic in nature, and the charters of these organizations clearly state that they will never become, or affiliate with, any labor union; therefore be it

RESOLVED, That the Florida Medical Association officially commend the purposes and objectives of the Florida Medical Assistants Association; and be it further

RESOLVED, That the component county medical societies be requested to provide all possible support to affiliated chapters of this worthy organization; and be it further

RESOLVED, That copies of this resolution be forwarded to all county medical societies in Florida.

(Relative to Medical Technicians)

(4) That criteria on standards for commercial schools for medical technicians or laboratory assistants as trade schools be established either through regulations by the State Department of Education or modification of the present law on medical technology. These criteria should embody the financial structure, training facilities and equipment, qualifications of instructors, curriculum and physical plant of each school.

(5) The existing program for the education and training of medical technologists (MT-ASCP) in AMA-approved schools be expanded and that senior and junior colleges as well as hospitals be encouraged to increase their facilities for training in this field.

(Relative to Nursing)

(6) That, with the anticipated increasing shortage of nursing personnel, the Association use every means possible to further the establishment or re-establishment of nursing schools in all categories of program.

(Relative to Podiatry)

(7) That hospital privileges for chiropodists (podiatrists) as defined in Chapter 461, Section 461.01, Florida Statutes, shall be under the supervision and responsibility of a physician or surgeon member of the medical staff of the hospital.

(8) That the application for recognition of the Florida Podiatry Association be approved and that podiatrists/chiropodists be officially recognized by the Florida Medical Association as an allied profession or vocation.

"The report of the Council on Voluntary Health Agencies is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objection, motion carried.

Council on Voluntary Health Agencies

MASON ROMAINE III, *Chairman*

Council:

The Council has held two meetings during the past year: September 9, 1961, and March 24, 1962. This early period of the Council's existence has been devoted largely to the development of organizational functions and to study of the possible areas in which the Council can become a useful servant of the Association, the voluntary health agencies and the public.

Following the meeting of the 1961 House of Delegates, the Council's membership stood at six, which remains the membership as of this writing. The six voluntary health agencies initially recognized by the Board of Governors, and from which liaison members were appointed subsequently, are the Florida Chapter, Arthritis and Rheumatism Foundation; Florida Division, American Cancer Society; Florida Society for Crippled Children and Adults; Florida Heart Association; Florida Association for Mental Health, and Florida Tuberculosis and Health Association. The applications of several other agencies have been reviewed and official recognition is recommended at this time for one agency (see recommendation No. 1 to follow).

The criteria earlier adopted by the Board of Governors for official recognition of voluntary health agencies by the Association were reviewed, unanimously accepted and approved. It was decided that recognized agency programs should be re-evaluated annually for the purpose of determining whether or not criteria requirements are still being met satisfactorily. This was accomplished early in 1962 for the six currently recognized agencies.

Florida's registration law for voluntary health agencies and the manner in which it is being implemented were studied by the Council. Questions were raised as to whether or not the original intent of the law was being carried out and even if the existing law as presently administered were serving any purpose. Upon invitation, a representative of the Office of the Secretary of State, which administers the law, attended the meeting of the Council held on March 24, 1962, and from the discussion held at that time came some worth while understanding and suggestions. (See recommendation No. 2).

The important and long-considered subject of establishing a Florida Health Council, or, at a minimum, a coordinating council for voluntary health agencies, was studied in detail by the Council. All state medical associations were queried in regard to the situations within their states, and the 33 replies received indicated a wide variety in methods and mechanisms for approaching this problem. Because of his long interest in the matter, the Acting State Health Officer, Dr. Albert V. Hardy, was invited to participate in the consideration of this question, and his counsel and opinions were gratefully received. The

role of such a proposed organization in providing much needed liaison not only between voluntary, but among official agencies, was agreed upon, but the importance of carefully delineating its limits and functions was stressed (see recommendation No. 3).

An increasingly active program is foreseen for the Council in working towards its objective of achieving and maintaining the Association's leadership in the public interest in this rather complex field.

Recommendations of Council for House of Delegates' approval:

1. That the National Foundation be granted official recognition by the Association as a voluntary health agency, thereby establishing formal, continuing liaison with this organization through the Council on Voluntary Health Agencies.
2. That the Secretary of State of Florida be requested to establish an advisory committee, the function of which would be to provide continuing consultation and advice in the administration of the voluntary health organization registration law (Section 617.26, Florida Statutes). It is suggested that this advisory committee include in its membership representatives of the medical profession, the voluntary health agencies and the public at large.
3. That the Florida Medical Association take the leadership in establishing a Florida Health Council, the purpose of which would be to provide a vehicle for liaison and coordination between all reputable organizations in Florida concerned with health. It is further recommended that the membership of this council include voluntary as well as official state agencies, and that it shall never usurp the functions of any member organization.

"The report of the Council on Medical Services is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Council on Medical Services

MARION W. HESTER, *Chairman*

Council:

The Council on Medical Services met at the Florida Medical Association headquarters in Jacksonville on June 11, 1961, with eight of the Council's 12 committees represented. Past committee activities and proposals for new work were discussed for all individual committees, and committee programs for the ensuing year were approved.

"The Committee recommends that section (c) of the report of the Committee on Aging be amended to read, "The medical schools of the University of Florida and the University of Miami sections on Gerontology."

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

1. COMMITTEE ON AGING

The Florida Medical Association Committee on Aging held four meetings during the past year.

This Committee has, for the second year, sponsored the chairmanship of the Joint Council for the Improvement of the Health Care of the Aged.

Members of this Committee have attended the second National Conference of the Joint Council to Improve the Health Care of the Aged, held in Chicago in December 1961.

This Committee has submitted resumés of plans for the care of indigent aged including the following: (1) The Westchester County Plan, (2) The Kenosha Plan, (3) The St. Louis County Medical Society Plan.

Members of this Committee will attend the Regional Conference on Aging to be held in Charlotte, North Carolina, April 13 and 14, and also the Institute on Nursing Home Administration to be held in Miami, March 27-29.

Representatives of the Florida State Board of Health reported to the Committee on the progress of the Home Nursing Program as a most important link in progressive patient care.

Recommendations:

That this Committee work closely with other groups concerned with the aging, such as:

a. The Florida Joint Council to Improve the Health Care of the Aged.
b. The Florida Council on Aging.
c. The medical schools of the University of Florida and the University of Miami sections on Gerontology.

1. That each local county medical society sponsor the formation at the local level of a Joint Council to Improve the Health Care of the Aged, similar to the one at state level.
2. That the program committees of the county medical societies plan programs on Geriatrics and a program on Gerontology, the latter to include lay organizations of the community.
3. That the Committee make efforts to organize speakers' groups on Geriatrics and Gerontology to be available for local groups.

"The Committee recommends to the House of Delegates that the recommendation of the Commitee on Blood concerning establishing of Red Cross Blood Banks be deleted. The Committee suggests that the Committee on Blood continue its work and make a special effort to consider the problems still present in some of the smaller and more isolated communities.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

Dr. James N. Patterson of Hillsborough spoke against the amendment of the Reference Committee and offered the following substitute motion: "I move that we do not approve the recommendation of the Reference Committee but that the recommendation of the Committee on Blood be approved and furthermore that we instruct the Committee on Blood to cooperate with the Florida Association of Blood Banks in working out a satisfactory program in some of the smaller or more isolated communities."

Dr. Sias: "I would just like to say that our Committee is in complete agreement with Dr. Patterson and this is really the intent of the Committee — that the Florida Association of Blood Banks try to work this problem out with the objections that are raised in the smaller communities."

Amendment carried.

Report as amended carried.

2. COMMITTEE ON BLOOD

The Committee on Blood received but one pertinent communication during the year, namely, a request from

the Florida Association of Blood Banks that no county medical society make a request for the establishment within its jurisdiction of a Red Cross blood bank since the state is now adequately served by existing blood banks. These banks have the capacity to expand in time of emergency and the Committee feels that new banks of Red Cross type would only complicate the picture and create confusion in competing for donors. It should be pointed out that the Red Cross by policy will not establish a blood bank in a community unless requested to do so by the county medical society.

Recommendations:

That the County Medical Societies be asked not to request establishment of Red Cross Blood Banks; that the Committee on Blood continue its work and make a special effort to consider the problems still present in some of the smaller and more isolated communities.

"The report of the Committee on Child Health is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

3. COMMITTEE ON CHILD HEALTH

With this Committee serving as a medical advisory committee to the State Department of Education and to the Florida State Board of Health, joint meetings have been held at the Florida Medical Association headquarters during the year for discussion of mutual problems. Implementation of the program for uniform standards throughout the state has showed some progress. In Manatee County, under the leadership of a member of this Committee (Dr. Irving E. Hall Jr.), a realistic school health program has been adopted, with the sanction and cooperation of the Manatee County Medical Society. The objective of this program is health education of parents and children, with emphasis upon the roles played by the teachers and private physicians in the health of the child.

There has been frank discussion of policies and a spirit of mutual helpfulness exhibited in various informal conferences, especially in the southern portion of the state. Here a tremendous burden has been placed upon educational and health officials by the influx of Cuban families. Parochial and privately operated schools do not come under the jurisdiction of the official state school health program. Although some financial assistance has come from federal and private sources, successful maintenance of standards in school health has been accomplished only with the continued efforts of teachers, physicians and other authorities interested in the problems presented. Again, we urge the formation and development of an Advisory Committee on School Health within each county medical society. The physician should be the leader and arbiter in problems related to school health.

The Committee has been active in emphasizing the importance of routine immunizations against infectious diseases. It has participated in various programs and seminars. The most recent of these is a series of regional meetings with the Florida Public Health Association in late May 1962 in which a member of the Child Health Committee will appear officially as an invited consultant. A physician conversant with the school health program and the policies of the Florida Medical Association is able to present his ideas and participate in the discussion.

We feel, that, during 1961-62, some gains have been made in our long range program of improved child health in this state: (1) Assistance was provided to the State Board of Health and the State Department of Education in revising Bulletin 4-D, the policy manual for Florida's school health program. (2) Upon the Committee's recommendation made in 1960, a state joint immunization study committee was activated and met November 5, 1961. After studying existing conditions in Florida, the joint group recommended that no compulsory immunization laws were necessary, but that selective educational efforts be continued to obtain higher immunization levels in certain specific segments of the population.

Recommendations:

1. That active school health committees be established by every county medical society to maintain a continuing, cooperative relationship with local school and public health authorities in providing leadership and advice relative to school health programs and services.
2. The Committee recommends, in collaboration with the Joint Immunization Study Committee, continuing and increased educational efforts towards achieving higher immunization levels with special emphasis upon those groups having lower percentages of immunization.

"The report of the Committee on Emergency Medical Service is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

4. COMMITTEE ON EMERGENCY MEDICAL SERVICE

During this past year the medical Civil Defense program, making its definitive plans for Emergency or Disaster Medical Care, has broken through the public's indifference to a defense against a vague threat and has made the individual citizen realize that, in case of a man-made disaster or other medical emergency, the entire resources of the medical profession are combined in a plan to give quickest and best care to the affected area. This objective has been accomplished through close coordination and interchange of ideas between the American Medical Association and governmental or Public Health Service, regional, state, county and local agencies.

The Selective Service has increased its requests for information regarding the status and essentiality of the members of different branches of the medical profession. These have been looked into and answers sent as completely as information could be obtained.

Recommendations: (Committee recommendations—not considered by full Council)

To continue with the same program of close coordination and to intensify it on local levels.

To obtain more newspaper publicity, with the idea of making each person realize his responsibility to inform himself on what action he should take in an emergency.

To urge the medical profession to do its part in the local communities to bring this subject before the public.

"The report of the Committee on Indigent Care was reviewed, and we recommend that recommendation No. 2 be deleted since it is covered under the report of the Committee on Public Health.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

5. COMMITTEE ON INDIGENT CARE

This Committee, meeting with Drs. Jere W. Annis, Simon D. Doff, Eugene G. Peek Jr., Turner Z. Cason and President Harvard, carefully re-reviewed the Indigent Medical Care Program in Florida and presented the following recommendations which were approved by the Board of Governors:

(1) That physicians in nonparticipating counties be encouraged to contact their county commissioners

in order to explain the purposes of the program and to have them become participating counties.

(2) We believe county financial participation in the costs and administration of tax-supported health services is a fundamental requirement for efficient and economical operation; therefore, we recommend a change in the Federal Regulations concerning interpretation of Public Law 86-778 Section 2 (a) (1) to provide that it shall be in effect in all political subdivisions of the state, and, if administered by them, be mandatory upon them.

(3) That review committees be established by the medical staffs of hospitals to review admissions under the Hospital Services for the Indigent and Public Assistance Recipients programs.

There was representation for the Committee at the meeting of the Florida Joint Council to Improve the Health Care of the Aged and Regional Seminar on Medical Care held in Atlanta. Informational contact was maintained concerning the development of home nursing care of the chronically ill and aged.

Recommendations: (Committee recommendations—not considered by full Council)

1. Continued efforts to implement recommendations approved by the Board of Governors.

"The report of the Committee on Labor is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

6. COMMITTEE ON LABOR

Purpose and Scope of Committee: The Committee on Labor is a new committee established under the Association's revised Charter and By-Laws which became effective in 1960. There are no objectives or responsibilities assigned specifically to the Committee in the By-Laws. The Council on Medical Services, however, of which the Committee is part, is charged "to act in liaison with labor organizations with relation to problems of medical policy and procedure." After reviewing activities of medical societies relative to organized labor suggested by the American Medical Association in the County Medical Public Relations Manual, it is the view of the Committee that its function be advisory in nature. Although the Committee should be empowered to implement active liaison activities with labor groups, it should have no authority to enter negotiations nor act as a bargaining agent for the medical profession. Its function should be to make recommendations to the Council on Medical Services in accordance with the lines of Association policy-making authority established in the By-Laws.

Labor in Florida: Recognizing the importance of knowing the groups with which it is concerned, the Committee undertook a study of organized labor in Florida. Lists of reporting labor organizations in the state were obtained from the U. S. Department of Labor and the Secretary of State of Florida. It was found that there are more than 800 local unions with approximately 100,000 members representing around 100 crafts. AFL-CIO affiliated unions are in the vast majority. The outstanding factor revealed by the study is the infinite complexity and variety of labor organizations including affiliated and independent trades councils, boards, unions, chapters, lodges, and numerous other forms of organization on state and local levels. It may be said without fear of contradiction that there is no one voice which speaks for organized labor in Florida. There is a state federation, however, which is made up of a substantial number of labor groups within the state—the Florida Federation of Labor. With the rapid increase in the number and types of industries in the state, labor inevitably is showing a corresponding growth. Labor's concern for medical services in Florida without a doubt will increase accordingly. The need is obvious for medicine to undertake preparations in a spirit of friendly but firm cooperation.

Labor-Medical Activities in Other States: In an effort to obtain a guide and suggestion for a proposed program in Florida, the Committee requested information from 11 carefully selected state and county medical societies in the Southeast and in areas of heavy labor union concentration throughout the country. Responses were received from all but one. In general, it may be said that there is no set pattern for establishing and maintaining liaison with organized labor. Some societies have no programs, others have attempted them in some form without success, and an exceptional few have developed what appear to be good programs. These few are in their infancy in development. Probably the most outstanding among programs studied is that of Pennsylvania, in which a joint labor-medical liaison committee is functioning.

Recommendations:

1. That authorization be given to the Committee on Labor to undertake exploratory talks with the Florida Federation of Labor and any other state labor groups deemed advisable with a view toward establishing a joint state labor-medical liaison committee, the scope of which would include consideration of all opportunities for the discussion of mutual medical care problems in a constructive fashion between representatives of organized medicine and organized labor at the state and or local levels, and consideration of mutually agreeable policy determinations in respect to labor-medical care problems which may be referred to the respective parent organizations, and
2. That, pending experience gained by formation and function of the state joint liaison committee, future consideration be given to encouraging county medical societies to establish similar appropriate machinery in their local areas.

"The Committee amended the recommendation of the Committee on Maternal Health to read: "The Committee recommends the study of these proposed statutes by the Legislative Committee."

"Mr. Speaker, I move the adoption of this portion of the report as amended.

No discussion; no objections, motion carried.

7. COMMITTEE ON MATERNAL HEALTH

The Committee on Maternal Health had two meetings during this year (1961), one on August 20 at the Colonial Inn, St. Petersburg Beach, and the other on December 2 at the Gault Ocean Mile Hotel, Fort Lauderdale. The Committee has continued to follow three main objectives:

(1) To initiate and conduct the Maternal Mortality Survey. This Survey was put into effect this year, and maternal deaths were reviewed at both meetings. The results of these studies will be published in The Journal of the Florida Medical Association in the future.

(2) To continue with the yearly presentation of the Postgraduate Obstetric-Pediatric Seminar. This year the eleventh Seminar was held for the first time on the West Coast, at the Colonial Inn, St. Petersburg Beach, on August 17-19, 1961. An excellent faculty was obtained, and the registration was increased even further by the addition of Mississippi to the number of participating states. Plans are now in effect to hold the next Seminar at the same location on August 17-18, 1962.

(3) To formulate certain laws relative to the practice of obstetrics and gynecology in Florida and to present these laws to the State Legislative Com-

mittee of the Florida Medical Association. Six laws were studied by the Committee and four of these laws are being sent forward to the Legislative Committee for proposed presentation to the 1963 Legislature. All of these laws were submitted in writing to all members of the Florida Obstetric and Gynecologic Society for study and modification.

Recommendations: (Committee recommendations—not considered by full Council)

The Committee recommends the study of these proposed statutes by the Legislative Committee.

"The report of the Committee on Mental Health is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

8. COMMITTEE ON MENTAL HEALTH

The Committee continued a precedent of fostering liaison between the physician and the various organizations, state and national, to which he is related clinically or administratively.

It recommended to the Governor that the newly created Division of Retarded Children be headed by a Doctor of Medicine, to assure proper evaluation and treatment of these afflicted youngsters. It continued its program of field trips to state institutions, including the institutions for the retarded and for child training. Through its chairman, it participated in the Eighth Annual AMA Conference of Mental Health Representatives, and concurred in the theme of the proposed program on mental health, the AMA Council on Mental Health First National Congress on Mental Health, to be held on October 4, 5 and 6. This conference served as the advisory body to that council, and the Florida Medical Association has a program already in effect at the local levels, while most other states still have theirs in the planning stage.

The Committee considered the "Hypnosis Law" (61-506), passed by the 1961 Legislature, and discussed the advantages of its establishing hypnosis as a practice of medicine, with its use restricted to the field of therapist's training, and how this law can be used to eliminate untrained technicians' use of the technique, legally. It resolved, and sent to the Board of Governors, a recommendation that "It will be deemed unethical for a member of the FMA to participate in any courses in hypnosis or hypnotic techniques or the application of same, offered by a faculty, wholly or partly, composed of non-medical teachers or instructors, except as part of training and teaching in a class A medical school." It considered, upon request by the Maternal Health Committee, the question of recommending new laws for sterilization and therapeutic abortions; it endorses, in principle, the value of eugenics; it opposes indiscriminate therapeutic abortions, and any law which could abrogate or compromise the rights of the person concerned, particularly the adjudicated incompetent; it urges the continuation of consideration of the individual circumstances of each case by the physicians involved, as representing the most ethical approach to the problem. It will continue its annual conference of state representatives, expanding the depth and scope by arranging a two day program to include state leaders, and county medical societies, and auxiliaries, mental health representatives and officers.

Recommendations: (Committee recommendations—not considered by full Council)

1. The Committee strongly urges Florida Medical Association and American Medical Association members to participate in the AMA Council on Mental Health National Congress on Mental Health, in October, by appearing on the program, or by attendance at the Congress, to demonstrate the leadership in this field, and to assure the success of the Congress.
2. It recommends that each physician familiarize himself with the "Hypnosis Law" (61-506) in order to be cognizant of its meaning and intent, and of the responsibilities now invested in the physician. It recommends passage of the recommendation to the Board of Governors regarding unethical association as a student or trainee of a nonmedical faculty proposing to teach the theory and practice of hypnosis.
3. It recommends that, if further consideration of the advisability of laws relating to sterilization, abortion, and eugenics, be implemented, adequate safeguards be set up to assure the rights and privileges of the person under consideration for this (these) procedure(s).
4. It encourages active participation by the physician in the mental health activities of the community, individually, or as a group, to assure the establishment or enhancement of ethical sources for information or treatment.
5. It recommends active participation by the local component societies and auxiliaries, and the officers, in the Florida Medical Association sponsored annual conferences at the state level, to advance further the cause of mental health in Florida.

"The report of the Committee on Public Health is approved as printed in the Handbook; however, I feel that it would be best to approve three of the items separately before approving the report as a whole.

"The first is a modification of Resolution 61-16, which was referred to the Committee on Public Health by the 1961 House of Delegates.

"Mr. Speaker, I move the adoption of this resolution as printed in the Handbook."

No discussion; no objections, motion carried.

"The second item is the resolution concerning appropriation of funds for the State Board of Health for control of radiation hazards.

"Mr. Speaker, I move the adoption of this resolution as printed in the Handbook."

No discussion; no objections, motion carried.

"The third item is the paragraph immediately following concerning the support of home care programs in the various counties of Florida.

"Mr. Speaker, I move the adoption of this portion of the report as printed in the Handbook."

No discussion; no objections, motion carried.

"Mr. Speaker, I move the adoption of the entire report of the Committee on Public Health as printed in the Handbook."

No discussion; no objections, motion carried.

9. COMMITTEE ON PUBLIC HEALTH

The Committee on Public Health held one regular meeting on March 11, 1962, and one emergency meeting and visited with certain members of a component county medical society on several occasions. It endorsed and lent its support to the oral poliovaccine programs in Hillsborough County after being requested to make recommendations by the county medical society. In addition to its regular duties, it gave special consideration to six subjects:

(1) The relations between the practices and practitioners of medicine and public health

(2) The proposed federal "Vaccination Assistance Act of 1962"
(3) Radiologic health
(4) Home nursing programs
(5) A central statistical center for cancer registry data
(6) The control of used disposable syringes

After review and full discussion by the Committee and certain invited experts, the Committee makes the following observations and recommendations:

Recommendations: (Committee recommendations—not considered by full Council)

In the important area of relations between the practice and practitioners of medicine and public health, it is evident that there is still a need for better communication and for better understanding of the wide variations in social, economic, public health and medical conditions and attitudes in the numerous counties in Florida. The Committee therefore recommends that The Journal publish a series of short articles, features, letters or similar items on the changing and varied concepts, definitions, policies and practices of public health as considered by practicing physicians, health departments, medical societies, voluntary health, service and civic organizations and labor and management. It further recommends that the Florida State Board of Health and the local health departments make available to the physicians of Florida copies of their policies, practices and services.

The Committee reaffirms the entire report of the 1960 Florida Medical Association Liaison Committee to the State Board of Health emphasizing again that centralization of control in public health (and other medical matters) is neither wanted by local groups nor is it desirable. The recommended close liaison between component county medical societies and their own local health departments might be enhanced if more public health physicians had some type of membership in county medical societies and if these physicians were then permitted and encouraged to participate more fully in county medical society affairs related to public health.

In relationship to Resolution 61-16, Patient Services through Health Departments, the Committee agree completely with the philosophies that, in general, individuals able to pay for their own health care should do so and that all patients, private or otherwise, receive better care when their total health needs are supervised by a personal physician. On the other hand, it recognizes the practical problems (1) of screening for medical indigency, particularly those who attend immunization clinics, whether sponsored by health departments, voluntary health, civic or other groups and (2) of getting patients, either private or otherwise, to avail themselves of a personal physician to supervise their over-all health needs. The Committee believes that the stated policy of the Florida State Board of Health since 1955 "to require that each county health officer follow, as far as legally possible, the direction of the county medical society on all medical problems" makes local interpretation and application of these philosophies feasible.

In order to emphasize further these basic philosophies, the following resolution, a modification of Resolution 61-16, is recommended:

WHEREAS every individual able to pay for his own health care should do so, and
WHEREAS each individual patient receives the best type of care when he has a personal physician supervising his total health needs; therefore be it
RESOLVED, That consideration be given to the ability to pay of each patient receiving treatment through the various health departments or other official agencies in the State of Florida; and be it further
RESOLVED, That each patient receiving treatment through the various health departments or other official agencies in the State of Florida be encouraged to have his total health care program supervised by a personal physician either in private practice or in a community clinic.

The Committee considered the direct request of the Florida State Board of Health for advise concerning the proposed federal "Vaccination Assistance Act of 1962" to provide funds for free vaccine for all children under five years of age and for the provision of additional health department personnel to initiate and organize immunization programs on a community basis. The Committee believes that this matter should be considered by other committees and councils in the Florida Medical Association and so forwarded it on to the President of the Florida Medical Association. The Committee wishes to point out (1) that all physicians are in accord with the stated objectives of the Bill, the immunization of all children against polio, diphtheria, whooping cough and tetanus; (2) that in Florida free vaccines and free vaccinations have long been available for those unable to pay; (3) that the Florida Medical Association and many of its component county medical societies have endorsed, initiated, organized and carried out immunization and other public health programs on a community basis when and where this approach was considered to be the best solution to the local situation; (4) that in spite of the above, significant numbers of children and even adults remain unimmunized.

The Committee wishes further to point out that even in the recent well organized and highly successful community-wide free oral polio vaccine programs in Dade and Hillsborough Counties, about 25 per cent of the target population refused to avail themselves of this service even though most of them had not previously been immunized with Salk vaccine.

In the field of radiologic health, the Committee (1) commends the Governor for designating the Florida State Board of Health as the state agency responsible for nuclear licensing and control as called for by Florida Statute (290.10); (2) endorses the action taken by the Florida State Board of Health in adopting regulations for the control of radiation hazards in the Florida State Sanitary Code (Chapter XXXIV); and (3) urges that the State Legislature make the necessary funds available to the State Board of Health to perform these services without charges to the medical and nonmedical users of radiation sources. Adoption of the following resolution is recommended:

WHEREAS the importance of the control of radiation hazards to the people of Florida has been recognized by the State Legislature by its enactment of a Nuclear Code, and
WHEREAS the Governor has designated the Florida State Board of Health to regulate and control the licensing of the various nuclear sources, and
WHEREAS the Florida State Board of Health has adopted regulations in the Florida State Sanitary Code which are approved of by the Florida Medical Association for the carrying out of its responsibilities, and
WHEREAS the State Legislature has refused to appropriate the necessary funds to carry out the objectives of the program of benefit to the entire population of the State of Florida; be it therefore
RESOLVED, That the Florida Medical Association go on record as urging the State Legislature to appropriate the additional necessary funds to permit the Florida State Board of Health to carry out its responsibilities for the control of radiation hazards, and be it further
RESOLVED, That copies of this Resolution be sent to legislators, mass media representatives and others interested in the health of the citizens of Florida.

The Committee reaffirms the strong endorsement and support of the Florida Medical Association in the planning, development and implementation of home care programs in the various counties of Florida. It does so with the understanding that these programs will be organized and controlled at a local level to best meet the needs of the local area and will not lead to duplication of existing services or agencies.

The Committee believes that the proposed project of the Florida Cancer Council, Florida State Board of Health and other interested groups for a service-research statistical center for the state's 24 tumor clinics will further improve the care of cancer patients. The Committee therefore endorses this project and urges the mem-

bers of component county medical societies of the Florida Medical Association to assist and cooperate with this project and to avail themselves of the reports of its results.

The Committee suggests that the hazards created by the improper discarding of used disposable syringes and needles be brought to the attention of those in the health fields, through the media of The Journal, Briefs or other appropriate channels.

"The report of the Committee on Rural Health is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

10. COMMITTEE ON RURAL HEALTH

(1) On the suggestion of Reference Committee No. II, the House of Delegates referred Resolution 61-2 (indigent care, migratory laborers — Collier County Medical Society) to our Committee for consideration. We attacked this serious problem by meeting jointly with the Collier County Medical Society in Naples on November 15, 1961.

In the discussion which followed, agreement was reached that the financial burden of furnishing medical and hospital care to indigent migrants and their families in Naples was a local problem and should be solved as such. Confidence was expressed that through local awareness, information and cooperation, the problem might become less serious in the future and could be solved through local action of the county medical society with community cooperation.

After the joint meeting the Rural Health Committee met and further discussed Resolution 61-2, liaison with farm groups and county rural health committees being activated in all Florida counties with medical societies.

On November 16, Mr. Nixon and the chairman made a field trip to Everglades City and Immokalee, observing migrant housing, public health and medical facilities.

(2) One of our outstanding members, Dr. Francis T. Holland of Tallahassee, received a special award for exceptional leadership (1956-1960) as chairman of the Florida Committee on Rural Health.

(3) The chairman with Mr. Nixon participated in a meeting to assist Cross City in finding a doctor, which was sponsored by the Sears-Roebuck Foundation on January 8, 1962.

(4) On February 16, 1962, the chairman lectured to a women's church group in Starke on "The Medical Care of the Agricultural Migrant in Florida."

(5) The chairman represented the Florida Medical Association at the following: Florida Farm Safety Committee and Florida Committee on Rural Health and attended all their meetings.

(6) On the invitation of President Kennedy, the chairman attended and participated in the President's Conference on Occupational Safety on March 6-8, 1962, in Washington, D. C.

Recommendations: (Committee recommendations—not considered by full Council)

We recommend that active county medical society rural health committees be formed where they do not exist and that the chairmen of such committees assume leadership of and form rural health councils composed of representatives from medical, dental, public health, farming and other appropriate local groups.

"The report of the Committee on Vision is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

11. COMMITTEE ON VISION

The Committee is continuing its program of attempting to install a uniform, medically supervised program of eye screening in all the public schools of the State of Florida. The Committee has worked at this for four years and results are encouraging. Out of 67 counties 25 are using the Atlantic City Test according to Committee recommendations. Nine counties are using the Massachusetts Test and 46 are using the Snellen Chart. These are acceptable programs. Most of these are under the supervision of the county health officers. There are six counties using other unapproved types of testing.

In 1960 this Committee reported on efforts in mass screening for detection of early chronic glaucoma. At that time the House of Delegates recommended that more than passive support be given to glaucoma screening programs. An outgrowth of this has been the Florida Coordinating Council for the Prevention of Blindness. It is composed of representatives from the Florida Medical Association, the Florida Society of Ophthalmology and Otolaryngology, the Florida Council for the Blind, the Florida State Board of Health, the Florida State Welfare Department, the National Society for Prevention of Blindness—Florida Division, and the Florida Lions Foundation for the Blind, Inc. Following guidelines laid down by this Council a full time continuous program of glaucoma screening was begun in Polk County in March 1962. Polk County has a population of over 200,000 of which 75,000 are age 40 or over. It is hoped to do glaucoma screening on the entire 75,000 people age 40 and over of which group 2 per cent will be found to have chronic glaucoma. It is believed that three years will be required to accomplish this objective. This Polk County effort is planned as a pilot program for the state. It is hoped that at intervals of a few months a new and similar program can be opened in other metropolitan areas of the state, until all such areas in the state are covered. This Committee hopes to see each of these metropolitan plans expanded to offer glaucoma screening to surrounding rural areas until all these rural areas are provided screening.

This Committee has sent Committee members as representatives to numerous meetings pertaining to vision and blindness throughout the state.

Recommendations: (Committee recommendations—not considered by full Council)

1. That work be continued in expanding eye screening in schools.
2. That medically sound programs of glaucoma screening be made available throughout the state as early as possible.
3. That the Florida Medical Association and its component county medical societies make every effort to keep these programs under the competent medical supervision which they should have.

Recommendation of Council for House of Delegates' approval: (Not considered by full Council)

A request from the Florida Society of Ophthalmology and Otolaryngology and also from the Florida Medical Association Committee on Child Health that a Florida Medical Association Committee on Hearing be formed has been considered. The Council believes this new committee is needed and recommends that the By-Laws be amended to create a Committee on Hearing.

"The resolution concerning home nursing care, presented in the Report of the Board of Governors, was referred to this Committee by your Speaker. This same recommendation was considered by the Committee on Public Health at its meeting in March of this year and its recommendation included in its report. Resolution 62-34,

submitted by the Broward County Medical Association, pertains to the same program and Leon County read a resolution opposing such programs at the reference committee hearings. It is the Committee's understanding that the funds referred to in the last WHEREAS of the resolution in the Report of the Board of Governors are federal funds from the Department of Health, Education, and Welfare through the Public Health Service. These funds have been made available to the Florida State Board of Health as a grant for establishing pilot programs for training public health nurses in the rehabilitation of stroke patients.

"It is the Committee's recommendation that home bedside nursing programs should be primarily developed wherever possible through local Visiting Nurse Associations with assistance from local health departments when requested at the local level. We further feel that this position has been very well stated in the recommendation of the Public Health Committee previously considered and adopted.

"Therefore, Mr. Speaker, I move that both resolutions on the home nursing program not be approved and not be published in The Journal."

There was lengthy discussion concerning the resolutions and the recommendation of the Reference Committee. Several amendments to the resolutions were offered, and one substitute motion was presented.

The Speaker suggested that action on these resolutions be postponed until the next meeting of the House of Delegates.

Dr. Erasmus B. Hardee of Indian River stated: "I believe we are all confused and at this point don't know what we're voting for and I am in favor of tabling Resolution 62-34 and the resolution on home nursing care presented by the Board of Governors until the next meeting of the House of Delegates; I so move."

No discussion; no objections, motion carried.

"The Committee recommends that Resolutions 62-5 (Dade), 62-11 (Jackson-Calhoun), 62-30 (Pinellas), 62-31 (Alachua) and 62-32 (St. Johns), which are all in regard to nonparticipation in a program of socialized medical care, not be approved and not be published in The Journal and that the following resolution be substituted:

WHEREAS the doctors of Florida stand on their traditional principles that the best medical care is that provided individual patients by their personal physicians without the intervention of any third party, and

WHEREAS hundreds of thousands of patients in Florida, 65 years and older, are leading useful lives as the direct result of their past and present medical care; therefore be it

RESOLVED, That the doctors of Florida will continue to explore any avenue to provide more complete medical care for the needy of all ages which does not interfere with the high quality of medical care achieved under our present free enterprise system.

The doctors in the State of Florida have no fear that our aged citizens will forsake these principles in the fight for the maintenance of the private practice of medicine as opposed to King-Anderson or any similar type legislation.

"Mr. Speaker, I move the adoption of this substitute resolution."

No discussion; no objections, motion carried.

"The Committee recommends that Resolution 62-10, Physician Services—Vocational Rehabilitation Service, be amended to read:

WHEREAS in 1959 the House of Delegates of the Florida Medical Association recommended that the various governmental agencies supporting medical care for certain people, in particular the Vocational Rehabilitation Service, begin to utilize the services of other physicians than those being Board Diplomates in the various specialties; therefore be it

RESOLVED, That the Florida Medical Association recommend to the Medical Advisory Committee to the Vocational Rehabilitation Service that the following be utilized as a criterion of competence in its selection of physicians to perform the various services:

In the event a physician is an active member of the medical staff of any hospital fully accredited by the Joint Commission on Accreditation of Hospitals, and is adjudged by the Credentials Committee and other involved committees of this hospital capable to perform services required by the Vocational Rehabilitation Service, he shall then be acceptable to the Vocational Rehabilitation Service for performing these services.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

"In Resolution 62-15, Radioactive Isotopes, the Committee recommends that the phrase 'it is requested' be deleted and be replaced by 'therefore be it RESOLVED, That the Florida Medical Association request.'

"Mr. Speaker, I move the adoption of this portion of the report as amended.

No discussion; no objections, motion carried.

Resolution 62-15

Radioactive Isotopes
Orange County Medical Society

WHEREAS the Atomic Energy Commission has given notice that certain radioactive isotopes which are used for diagnostic purposes will be exempt from its licensing requirements (10 CFR Part 30 "Licensing of By-Product Material"), and

WHEREAS the Atomic Energy Commission, as provided under Section 274B of the Atomic Energy Act, is enabled to enter into agreement with the governor of any state whereby the state would accept regulatory responsibility for radioactive isotopes as used by physicians, and

WHEREAS the Florida State Board of Health has already made plans for and is ready to accept responsibility for licensing of physicians for use of radioactive isotopes, therefore, be it

RESOLVED, That the Florida Medical Association request that the governor of the State of Florida implement the carrying out of this plan so that all diagnostic and therapeutic radioactive isotopes are released only to licensed physicians who have had sufficient training and experience in their use, with these requirements being similar to those now in effect with the Atomic Energy Commission; it is further requested that radium be under licensing control. We do not agree with the Atomic Energy Commission's decision to release certain diagnostic radioisotopes to any person licensed to dispense drugs, since this would include many physicians who have no knowledge or training in the uses, limitations, and possible dangers of radioactive materials.

"The Committee recommends that the first paragraph of Resolution 62-24, Visual Screening, be amended to read: 'RESOLVED, That no county medical society sponsor or endorse eye screening in the schools in the State of Florida that is not supervised or controlled by members of the local county medical society.'

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

Visual Screening

RESOLVED, That no county medical society sponsor or endorse eye screening in the schools in the State of Florida that is not supervised or controlled by members of the local county medical society; be it further

RESOLVED, That, if this resolution be accepted by the Florida Medical Association, the latter instruct the Executive Committee of each County Section of its action.

Dr. Alpheus T. Kennedy of Escambia suggested that the resolution which was substituted for Resolutions 62-5, 62-11, 62-30, 62-31 and 62-32 be sent to the county medical societies before being printed in The Journal.

Dr. Stewart: "The Speaker thinks your point is well taken, because a majority of the members of the Florida Medical Association can, at any time, overrule any action of the House of Delegates; so the Speaker will request that this be sent out immediately. That does not require a motion."

"The Committee recommends that Resolution 62-29, Saskatchewan Doctors, be approved as presented to the First House of Delegates.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

WHEREAS a small but substantial segment of medicine has come face to face with the onslaughts of socialized medicine and has faced the situation with courage and foresight that would make them worthy of the term patriots, and

WHEREAS their stand has come in a climate of other socialistic trends that would augur disaster for any other than staunch men of true purpose; therefore

NOW BE IT RESOLVED that the medical doctors of Saskatchewan Province, Canada be heartily commended for the resoluteness that has won for them the first skirmish with socialistic forces, and

FURTHER BE IT RESOLVED that we, here in a sister country, be stimulated to similar courageous action by this example, and

FURTHER BE IT RESOLVED that we, the FMA in meeting assembled, do wholeheartedly and enthusiastically congratulate them, and

FINALLY BE IT RESOLVED that we offer to them future support, both spiritual and material, in their continuing battle, and that this or a similar resolution be placed before the House of Delegates of the AMA by our representatives to that body.

"Mr. Speaker, I move the adoption of this entire report as amended."

No discussion; no objections, motion carried.

REPORT OF REFERENCE COMMITTEE No. III

Finance and Administration

Dr. Edward Jelks: "Mr. Speaker and Members of the House of Delegates: Your Reference Committee gave careful consideration to items referred to it and makes the following report:

"In the Report of the Board of Governors, we recommend an addition to the section concerning Voluntary Health Agencies as follows: After the word 'approved' add 'provided the National Foundation complies with the Laws of the State of Florida in relation to voluntary health agencies.' We further request the Council on Voluntary Health Agencies to determine if these organizations are complying with the Laws of the State of Florida.

"With reference to the section of the report concerning dues, this Reference Committee recommends the adoption of the recommendation of the Board of Governors for an increase to $50.00 in annual dues; however, this committee is cognizant of the fact that conditions beyond our control may necessitate a further increase or assessment on members of the Association in the near future if this Association is to carry out its programs adequately. The present recommendation for an increase is urgently needed.

"In regard to the section on the Senior Citizens Contract, the Committee realizes that this is not complete coverage and hopes that continued effort will be made toward that end.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

Report of the Board of Governors

S. CARNES HARVARD, *Chairman*

During the Association's administrative year and prior to the printing of this report, four meetings of the Board of Governors have been held. They were at Bal Harbour on May 28, 1961, West End, Grand Bahama Island, on September 29 - October 1, 1961, and Jacksonville on January 13, 1962 and April 1, 1962. A special meeting of the Board was held by telephone conference on December 12, 1961. If it is necessary to hold another meeting of the Board of Governors prior to the Annual Meeting, it will be covered in a supplement to this report and presented to the first meeting of the House of Delegates on May 10, 1962.

The Chairman wishes to call special attention to the outstanding service rendered by the Board of Governors during this year. The members have attended meetings at great personal sacrifice of time and have worked forcefully and logically at the task of conducting the business of the Association. It has been a rare privilege to work with these outstanding and dedicated physicians this past year.

MAJOR ACTIVITIES

ANNUAL MEETING.—The Board of Governors approved the program and schedule of the Annual Meeting submitted by the Chairman of the Committee on Scientific Work. The format differs from that in previous years in that the meeting will begin on Thursday morning, May 10, and end on Sunday, May 13, at noon, thereby allowing those in attendance to utilize Sunday afternoon to return home. The specialty groups will meet all day Saturday, May 12, rather than Saturday afternoon and Sunday morning as scheduled last year. The scientific program again this year is being presented in cooperation with a number of the special interest groups.

BUDGET.—The Board carefully reviewed the financial statement and audited statement presented by the Secretary-Treasurer and the Executive Director. In 1961 the Association had an income from all sources of $239,114.94; total expenses incurred were $223,106.57, for a net excess of income over expenses of $16,008.37. The Board approved an annual operating budget for the calendar year 1962 in the amount of $224,000.00 plus 5 per cent for reserve in the amount of $12,000.00, for a total of $236,000.00. This report was presented by the Executive Director after consultation with the Secretary-Treasurer and is based upon an anticipated income of $238,000.00.

COMMUNITY SERVICE AWARD.—The Board reviewed the nominations received for the A. H. Robins Award for "Outstanding Community Service by a Physician" and selected William D. Sugg, M.D., of Bradenton for this Award, which will be presented at the first meeting of the House of Delegates on May 10.

JOURNAL EDITORS.—The Board appointed Thad Moseley, M.D., as Editor of The Journal and Franz H. Stewart, M.D., Charles K. Donegan, M.D., and John M. Packard, M.D., as Assistant Editors, and commended them for their outstanding work as pro tem Editors.

PRESIDENTS' AND SECRETARIES' CONFERENCE.—The Board sponsored the Fourth Annual Conference for Presidents and Secretaries of county medical societies on January 13 and 14, 1962 in Jacksonville.

GENERAL PRACTITIONER OF YEAR AWARD.—The Board abolished the Florida Medical Association Committee on General Practitioner of the Year since the General Practitioner of the Year Award of the American Medical Association had been discontinued.

MEDICARE—The Board approved the recommendation of the Medicare Mediation Committee to extend the Association's contract for another year (May 1, 1962 - April 30, 1963).

AMERICAN MEDICAL ASSOCIATION ANNUAL MEETING.—The Board was advised by the American Medical Association that it will hold its clinical meeting in Miami Beach in 1964.

VOLUNTARY HEALTH AGENCIES.—In compliance with the By-Laws and rules adopted by the Board, the National Foundation, which had applied for recognition as a voluntary health agency, was approved, provided the National Foundation complies with the Laws of the State of Florida in relation to voluntary health agencies.

ALLIED PROFESSIONS AND VOCATIONS.—In compliance with the By-Laws, the Board approved a recommendation of the Council on Allied Professions and Vocations that the application of the Florida Podiatry Association be approved, and that podiatry be officially recognized as an allied profession or vocation.

FLORIDA MEDICAL ASSOCIATION INVESTMENT TRUST.—Upon recommendations of the Florida Medical Association Investment Trust Committee, the Board of Governors approved amendments to the Trust to allow participation by professional service corporations, all of whose stockholders are members in good standing of the Florida Medical Association.

WORKMEN'S COMPENSATION FEE SCHEDULE.—Upon invitation of the Florida Industrial Commission, the Board, in compliance with the By-Laws, designated that the Committee on Fee Schedules be appointed by the Florida Industrial Commission as the Association's official medical representatives to the Commission's Medical Fee Schedule Committee, provided the Commission would agree to delete old members and add new ones as they take their places on the Association's Committee on Fee Schedules.

FLORIDA ORTHOPEDIC SOCIETY.—The Board accepted, on April 1, 1962, the action of the Florida Orthopedic Society at its called meeting on March 25, 1962, where action to reaffirm its intentions to cooperate with the Florida Medical Association and abide by the Charter and By-Laws was taken, as compliance with the action of the Board of Governors on January 13, 1962, provided that the Florida Orthopedic Society distribute copies of its action to all of those to whom the original Orthopedic Society resolutions were originally sent.

FLORIDA NEUROSURGICAL SOCIETY. — The Board withdrew recognition of the Florida Neurosurgical Society as a specialty society of the Florida Medical Association, effective April 1, 1962, for failure to comply with the Board's action of January 13, 1962, whereby the Florida Neurosurgical Society was requested to retract its communications regarding the Workmen's Compensation Fee Schedule.

EXPULSION OF MEMBERS.—The Board approved the recommendations of the Judicial Council and expelled three members from membership in the Florida Medical Association effective April 1, 1962, and directed the Walton-Okaloosa-Santa Rosa County Medical Society to expel them from membership in the Walton-Okaloosa-Santa Rosa County Medical Society.

RADIOLOGY.—The Board approved the recommendations of the Judicial Council concerning Radiology and referred the matter to the Judicial Council for implementation. The recommendations of the Judicial Council were as follows:

> "We recommend to the Board of Governors that as radiologists, anesthesiologists, and pathologists are all doctors of medicine and are bound by the *Principles of Medical Ethics* the same as any other doctor of medicine, or group of physicians, if they have a contract with any hospital whereby their services are purveyed by the hospital, then the hospital is engaged in the corporate practice of medicine, which is illegal; the doctors are allowing themselves to be exploited and are violating the *Principles of Medical Ethics* of the American Medical Association and procedures must be taken against them."

FRATERNAL DELEGATES.—The Board approved the exchange of fraternal delegates with the Medical Association of Puerto Rico.

FMCBG and AMPAC.—The Board approved the following statement of policy concerning approval of the Florida Medical Committee for Better Government and the American Political Action Committee:

> "The Florida Medical Committee for Better Government and the American Medical Political Action Committee are nonprofit, voluntary, nonpartisan, unincorporated political action committees; membership

in the FMCBG is available to physicians and their wives; membership in the AMPAC is available to physicians and their wives, immediate members of their families, and others; emphasis is placed on the fact that the FMCBG and AMPAC are organizations separate and distinct from the Florida Medical Association as required by law; the Board of Governors heartily approves the purposes and goals as stated in their by-laws; effective political action must be carried out on a local level and effective implementation must be done by local groups of physicians; all physicians in Florida are encouraged to join FMCBG and AMPAC."

QUACKERY.—The Board established an ad hoc Subcommittee of the Board on Quackery.

VENOMOUS SNAKE BITES.—The Board established a Subcommittee on Venomous Snake Bites.

CARDIOVASCULAR DISEASE.—The Board approved the participation of the Florida Medical Association in the establishment of a Joint Policy and Coordinating Council for Cardiovascular Disease.

ANNUAL MEETING 1963.—The Board selected the dates of May 8-12, 1963 and released the dates of May 15-19, 1963 for the Annual Meeting in Jacksonville. The Association is to utilize the Hotel Robert Meyer and the new Jacksonville Civic Auditorium for the meeting. This location and these dates have been previously approved by the House of Delegates.

DRUG VENDOR PROGRAM.—The Board approved the recommendation of the Medical Advisory Committee to the State Department of Public Welfare as follows:

"The filling of prescriptions for public assistance recipients under the Vendor Payment Program for Prescribed Medicine should be limited to pharmacists except in localities where there are no drug stores with pharmacists."

OSTEOPATHY.—The Board of Governors adopted the following Principles and Statement regarding Osteopathy on September 30, 1961:

PRINCIPLES

We agree with the statement of policy of the American Medical Association relating to Osteopathy adopted by its House of Delegates in June 1961:

"There can never be an ethical relationship between a doctor of medicine and a cultist; that is, one who does not practice a system of healing founded on a scientific basis."

STATEMENT

We do not recognize such a thing as "Osteopathic Medicine." We recognize the word "medicine" to refer to a healing art based on fact and on generally accepted truths, and the word needs no further qualification.

Osteopathy is cultism as defined by dictionaries:

"2. Devoted attachment to, or extravagant admiration for, a person, principle, etc., especially when regarded as a fad; as, the cult of nudism. 3. a group of followers; sect."

"A system of treating disease based on some special and unscientific theory of disease causation."

"Osteopathy - 2. A system of therapy in which diseases are treated by manipulating the bones and by other manual manipulations intended to restore the deranged mechanism of the body."

"That system of the healing art which places the chief emphasis on the structural integrity of the body mechanism, as being the most important single factor to maintain the well-being of the organism in health and disease."

The osteopathic concept is accepted and taught only in schools of osteopathy where its system is the foundation of education. The practice of cultism is not a matter of degree. One who practices cultism in any manner is a cultist. Therefore, a practitioner of osteopathy in any form is a cultist.

While a Florida Statute acknowledges the term "Osteopathic Medicine," defining it as that system or school of medicine which is taught and practiced in the standard colleges of osteopathy, this statutory definition is not a recognition of the scientific validity of osteopathy, or a recognition of osteopathy as the practice of medicine based upon accepted scientific truths.

The use of the term "osteopathic medicine" or the term "osteopathic physician" is misleading as the terms imply that two schools of medical thought exist which are of equal merit. Since the use of the designation "D. O., Doctor of Osteopathy" suggests something different from the designation "M.D., Doctor of Medicine," the use of both these designations by an individual is an admission by him of the practice of cultism. This is an unethical act by a doctor of medicine. It is recognized that many individuals, licensed only as osteopaths, are practicing medicine, rather than osteopathy. It is recommended that studies be made to determine means for such individuals who are practicing medicine, when only licensed as osteopaths, and who desire to be recognized as practitioners of scientific medicine, can pursue a course of study and training to obtain a degree of Doctor of Medicine entitling such individuals to be recognized by other doctors of medicine as professional colleagues.

At the present time in Florida, there is no public outcry against, or indication of a demand for, the abolition of the practice of osteopathy. There has been no indication that the osteopaths licensed to practice in Florida object to being classified as osteopaths, that they desire to become doctors of medicine, or that they want anything else from the medical profession but recognition as professional equals.

The public looks to the doctors of medicine, members of this Association, not only for medical care, but also for accurate information for guidance on questions relating to health and medicine. Should this Association or its individual members do anything to suggest its approval of cultism or cultists, or of the practice of unscientific medicine, not only would it be a disservice to the public, but it would also be a misuse of public trust.

The Board of Governors of the Florida Medical Association therefore will initiate no action that indicates professional recognition or amalgamation with individuals in Florida licensed as osteopaths; however, the Association will be receptive to suggestions made by osteopaths or by associations of osteopaths which are intended to lead to the qualification of such osteopaths as doctors of medicine. We recognize that there are osteopaths in Florida who have not yet indicated they are no longer cultists, or that they are practicing other than as osteopaths. Some indication from osteopaths indicating a desire for additional training is essential. This Association will welcome the opportunity to entertain officially ideas for this preparation.

In the meantime, it is recommended that component county medical societies of the Association establish policy regarding relationship of doctors of medicine with osteopaths within their individual areas. Complaints or problems which cannot be solved at the local level should be submitted through appropriate committees of the Association for consideration and action. It is observed that no broad policy covering every situation, existing in all sections of the state, can be made at this time. Until the present over-all situation throughout the state changes, our attitude withholding professional recognition of osteopaths as a group must be maintained.

The right to practice a healing art is regulated by the Florida Statutes, which define "Healing Art." Since the right to practice a healing art in a hospital is generally controlled and granted by boards composed of lay members, if a hospital is required by law or by its own rules and regulations to admit a cultist to practice, it shall not be considered an unethical act per se for a doctor of medicine, a member of this Association, to practice in that hospital, provided he does not enter into any professional relationship with a cultist.

AMERICAN MEDICAL EDUCATION FOUNDATION CHAIRMAN.—The President of the Florida Medical Foundation was designated as the Florida Chairman of the American Medical Education Foundation.

STATE HEALTH OFFICER.—The Board of Governors adopted a resolution concerning Wilson T. Sowder, M.D., Florida State Health Officer, who is on leave of absence with the United States Public Health Service, commending him for his outstanding service to the State of Florida, his invaluable contribution to the advancement of Public Health in Florida, his cooperation with and assistance to the programs and objectives of organized medicine and to the physicians in private practice, and his monumental work in Florida, wishing him well in his new special field of endeavor, bidding him Godspeed and assuring him of a warm welcome when he returns to his post in Florida.

RELATIVE VALUE STUDY.—The Board approved a recommendation of the Committee on Fee Schedules that the California Relative Value Study, its nomenclature, code numbers, ground rules, etc., with modifications to bring it in line for Florida, be adopted.

SENIOR CITIZENS CONTRACT.—The Board approved that portion of the proposed Blue Shield Senior Citizens Contract concerning special low income provisions, in principle.

MEMBERS INSURANCE.—The Board approved the recommendation of the Committee on Members Insurance broadening coverage of the Association-sponsored Disability Program.

ASSISTANCE TO COUNCILS AND COMMITTEES.—During the past year a great deal of time and effort was put forth to implement the policies determined by the House of Delegates and to coordinate the activities of the various Councils and Committees. The Board had the opportunity and privilege to work closely with the Councils. At the meeting of the Board of Governors on April 1, 1962, all Council reports were carefully reviewed and transmitted to the House of Delegates in the Delegates' Handbook. Specific recommendations of the Board regarding these reports will be presented to the appropriate reference committees.

NOMINATIONS

CERTIFICATE OF MERIT.—The Board recommends that William M. Rowlett, M.D., of Tampa, be awarded the Association's Certificate of Merit.

BLUE SHIELD BOARD OF DIRECTORS.—The Board of Governors reviewed the nominations for the Blue Shield Board of Directors, prepared by the Blue Shield Nominating Committee, and from the three nominations for each physician directorship the following two were chosen:

Medical District "A"	Medical District "C"
Three year term	Three year term
Henry J. Babers Jr., M.D.	W. Dean Steward, M.D.
Henry L. Harrell, M.D.	David J. Lehman Jr., M.D
Medical District "D"	Three year term
John D. Milton, M.D.	Donald F. Marion, M.D.
At large — Three year term	
Thomas E. McKell, M.D.	Alpheus T. Kennedy, M.D.

The three lay members nominated by the Nominating Committee were approved by the Board as follows:

District "C"	At Large—Three year term
Three year term	Mr. James H. Couey Jr.
Mr. C. DeWitt Miller	At Large—Two year term
	Mr. H. P. Osborne Jr.

COMMITTEE ON MEMBERSHIP AND DISCIPLINE.—As provided for in the By-Laws, the Board of Governors nominates the following physicians for those terms expiring in 1962 and to fill the newly created terms in compliance with the new Congressional Districts in Florida. They are:

District 1	William C. Roberts, M.D.	1963
	Sidney G. Kennedy Jr., M.D. (re-election)	1966
District 2	Ashbel C. Williams, M.D. (re-election)	1966
District 3	Edward J. Lauth Jr., M.D.	1964
	John R. Hilsenbeck, M.D.	1966
District 5	W. Wardlaw Jones, M.D.	1964
	John J. Cheleden, M.D.	1966
District 6	William H. Proctor, M.D.	1966
District 7	John M. Butcher, M.D. (re-election)	1966
District 9	James T. Cook Jr., M.D.	1965
District 10	Ernest R. Bourkard, M.D.	1964
District 11	Frank C. Bone, M.D.	1963
District 12	Edward L. Cole Jr., M.D.	1965

RECOMMENDATIONS

BY-LAWS.—After careful consideration, the Board of Governors recommends to the House of Delegates the following amendments to the current By-Laws of the Florida Medical Association:

Amend Chapter I, Section 2, by adding an additional paragraph 3:

"Item 3. HONORARY MEMBERS. Any doctor of medicine whether or not residing in the State of Florida, who is not engaged in the practice of medicine in the State of Florida, and who has rendered distinguished service to his profession, or who has in some way been a benefactor of this Association, may be made an Honorary Member of the Association in the manner hereinafter provided."

Item 3 shall be renumbered Item 4.

Amend Chapter X, Section 2, by adding an additional paragraph 6:

"All dues and fees shall be automatically waived for all Honorary Members approved for such classification by the Board of Governors."

(It was requested by the Board of Governors on September 29, 1961 that this amendment be drafted.)

Amend Chapter I by adding the following paragraph at the beginning of Section 3, Rights and Privileges:

"Membership in the Association confers no vested right to the holder thereof, but is a conditional privilege revocable for cause. Each doctor of medicine, by accepting membership in the Association, becomes subject to all provisions of these By-Laws and subject to disciplinary proceedings authorized hereunder."

Amend Chapter I by adding the following paragraph at the beginning of Section 4, Suspension or Involuntary Termination of Membership:

"The primary purpose of disciplinary action of members is the protection of the public, this Association, and the public well-being, as well as the discipline of a member of this Association. It is the responsibility of the Association to purge the Association of those unworthy to be members and it is the obligation of the Association and the individual members thereof to give unlimited cooperation and assistance to component societies in the discharge of the societies' responsibility. The component society is delegated expressly the authority, power and duty to maintain high ethical and professional standards of its members, and to take such proceedings as are authorized to insure such standards for members of the Association. Violation of the Principles of Medical Ethics as adopted by the Association is a cause for censuring, suspending or otherwise disciplining a member. The commission by a member of any act contrary to honesty, justice or good morals, whether the act is committed in the course of his relations as a doctor of medicine or otherwise, and whether or not the act is a crime, constitutes a cause for discipline."

DUES.—It is the recommendation of the Board of Governors that the annual dues for active members be increased to $50.00. This increase is urgently needed because of the increased cost of committee activities and general activity of the Association, the approaching necessity for enlarging the headquarters building, and the increased cost of doing business with no increase in dues in 12 years.

"In a supplemental report, the Board of Governors has recommended the following amend-

ments to the By-Laws of the Association:

1. Amend Chapter VIII, Section 3, Subsection 2 by adding thereto:
   "The Judicial Council shall consist of the several chairmen of the respective committees on the Council and an additional member to be selected by the Board of Past Presidents from its membership to serve for one year."
2. Amend Chapter IV, Section 6 of the By-Laws by adding thereto:
   "The House of Delegates shall have the power to determine its own membership and may by three-fourths vote of those delegates present in official session refuse to seat any delegate or alternate delegate."

"The foregoing amendments are approved by the Committee with the understanding that they will be subject to review by the Association's legal counsel.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

"The report of the Judicial Council is approved as printed in the Handbook, and the supplemental report of the Judicial Council as presented at the First Meeting of the House of Delegates is approved.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Judicial Council

HOMER L. PEARSON JR., *Chairman*

The Judicial Council of the Florida Medical Association held two meetings during the year.

One was held with the Lake County Medical Society at Mount Dora. The purpose of the meeting was to assist the Society in straightening out difficulties it was having with certain members. The meeting was a success. Our other meeting was held in Orlando to hear charges presented by the Florida State Welfare Board against three members. The report of this meeting you already have.

It was necessary to cancel a meeting scheduled in Cocoa for March 18. A supplementary report will be made following this meeting.

We have received no report from the Committee on Membership and Discipline, Dr. Gordon H. McSwain, of Arcadia, Chairman.

The report from Dr. Frances H. Langley, Chairman of the Grievance Committee, was short and refreshing. All cases reported were successfully disposed of at the local level, as they should be.

The Committee on Medical Licensure had a busy year. After some confusion, 7,900 Florida licensees were registered with the State Board of Medical Examiners. Inspections and investigations are being made. Cuban refugee physicians are among us; some are causing considerable difficulty; and, some are being aided and abetted by our own doctors in breaking the law. Most are cooperating. These we are trying to help.

The Judicial Council asks the Florida Medical Association members to cooperate with the Board of Medical Examiners in its disciplinary efforts.

We have received several requests for opinions in matters pertaining to medical ethics which have been given.

The Judicial Council has considered the request and desire of those members of the Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society residing in Gadsden County, and those members of the Walton-Okaloosa-Santa Rosa County Medical Society residing in Okaloosa and Santa Rosa Counties for separate component county medical societies and recommends:

1. That a charter be issued to the Gadsden-Liberty County Medical Society:
2. That a charter be issued to the Okaloosa-Santa Rosa County Medical Society:
3. That the issuance of these charters be contingent upon these new county medical societies adopting constitution and by-laws or being incorporated with by-laws not in conflict with the Articles of Incorporation and By-Laws of the Florida Medical Association. The determination of compliance with this provision shall be made by the Judicial Council.
4. The Charter of the Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society shall be changed to the Leon-Wakulla-Jefferson County Medical Society.
5. The Charter of the Walton-Okaloosa-Santa Rosa County Medical Society shall be changed to the Walton County Medical Society.

"The report of the State Board of Medical Examiners is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Florida State Board of Medical Examiners

HOMER L. PEARSON JR., *Secretary-Treasurer*

During 1961 the Board of Medical Examiners examined for licensure 587 applicants; 524 received licenses, and 63 failed.

We held 11 hearings which resulted in the following action being taken:

3 licenses revoked — (1 mental incompetency, 2 abortion)
1 license suspended — (narcotic addiction)
2 suspensions terminated at end of two years with no narcotic privileges
1 suspension terminated at end of two years with full restoration of rights and privileges
3 semiannual interviews with physicians on probation
1 request for termination of two year suspension to be terminated after one year—denied

We have had two regular meetings and one called meeting of the Board. Discussions and plans were made for the additional duties the Board was to assume.

One of the duties was that of annual registration of the medical licensees of Florida, which required complete revamping of the office and addition to the staff personnel. After much difficulty, we have registered approximately 7,915 physicians with Florida licenses. The breakdown as to in state, out of state, and other statistical data will be compiled at a later date.

We, also, assumed certain investigative duties which to date have been carried out with success. We are preparing to set up a more extensive investigating department with the help of the Attorney General's office.

We have been having trouble with Cuban refugee doctors. Most of them are cooperating, but a few with the help of some of our licensed medical doctors, are creating somewhat of a problem. We are receiving reports of some who are practicing without a license and some who are in the abortion racket. Each complaint is investigated.

During the year we have had three replacements of members of the Board. Dr. Ralph B. Spires was replaced by Dr. Alpheus T. Kennedy, of Pensacola; Dr. Sidney Stillman was replaced by Dr. George H. Garmany, of

Tallahassee; and Dr. Robert T. Spicer was replaced by Dr. Courtlandt D. Berry, of Orlando.

At the June meeting, Dr. S. Carnes Harvard was elected President; Dr. Morris B. Seltzer, Vice President; and Dr. Homer L. Pearson Jr., Secretary-Treasurer. Dr. Pearson was also elected Director of the Board on a full time basis, and Mrs. Marjoriann Keebler was elected Assistant Director.

The next meeting of the Board of Medical Examiners will be June 15-19, 1962 at the Deauville Hotel, Miami Beach.

"The report of the Secretary-Treasurer and Executive Director is approved as presented in the Delegates' packets.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

1962 Annual Report

Secretary-Treasurer Samuel M. Day, M.D.
Executive Director, W. Harold Parham

This report covers the administrative year 1961-1962 and is submitted as a brief summarization of the many and varied activities of the Secretary-Treasurer, the Executive Director and the Executive Office during this period. The Association's over-all activities have been covered in the Board of Governors, Council and Committee Reports presented to the House of Delegates. Association activities have become quite voluminous in recent years to the point of taxing the present facilities and staff. Every effort is being made under these circumstances not to allow efficiency to be materially affected.

Secretary-Treasurer

The constitutional Secretary has carried out the various duties required by the By-Laws of the Association and the functions requested by the Board of Governors. The Secretary has also attended as many national, regional, state, Association Council, Committee and county medical society meetings as possible during the year. Personal assistance to officers of county medical societies and the Association's Executive Office has also been rendered whenever possible.

Membership of the Association has exceeded all previous records with a total of over 4,425 members. Less than 110 of this number are retired, and an additional 566 physicians were licensed in Florida this year. There are approximately 5,600 licensed Florida physicians who reside in the state.

The report of the Treasurer, including the financial statements, covers the period January 1 through December 31, 1961. The books have been audited by Lucas and Herndon, Certified Public Accountants, and their Certificate of Audit is incorporated in the statements which appear at the end of this report. In summary, the income, expenditures, and gross gain are as follows:

INCOME

Dues and Fees	$160,335.00
Journal	43,970.00
Directory	2,692.00
Technical Exhibits	19,470.00
Interest	3,068.00
Special Services	7,888.00
Increment in Value Pension Trust	1,692.00
	$239,115.00

EXPENDITURES

General	$ 88,212.00
Executive Director's Dept.	19,164.00
Administrative Department	32,689.00
Public Relations Department	17,315.00
Publications Department	21,293.00
Legislative Department	17,631.00
Building and Grounds	12,619.00
Depreciation and Inventory Adjustment	8,098.00
Special Services	6,086.00
	$223,107.00
Net Excess of Income over Expenditures ($11,000 of this amount placed in reserve)	$16,008.00

The Board of Governors approved the proposed budget as prepared by the Executive Director in consultation with the Secretary-Treasurer for the 1962 calendar year as follows:

General	$101,400.00
Executive Director's Dept.	20,035.00
Administrative Department	33,235.00
Public Relations Department	16,850.00
Publications Department	18,350.00
Legislative Department	17,810.00
Building and Grounds	16,320.00
Reserve	12,000.00
	$236,000.00

This budget was based upon an anticipated income for the 1962 calendar year as follows:

Dues and Entrance Fees	$165,000.00
Advertising, Journal and Directory Sales	48,000.00
Technical Exhibit Space	20,000.00
Interest and Special Services	5,000.00
	$238,000.00

The anticipated income is off again this year due to a decrease in advertising in The Journal and sale of exhibit space at the Annual Meeting. There was a cutback by pharmaceutical companies in promotional advertising nationwide last year and competition by numerous medical organization and meetings becomes greater each year.

Executive Director

The Executive Director has carried out the duties and responsibilities as directed by the Board of Governors, which include the general responsibility to carry out the directives of and service to the House of Delegates, Board of Governors, Executive Committee, Officers, American Medical Association Delegates; the development, organization, coordination and implementation of the over-all activities of the Association, management of finances, Executive Office, personnel and headquarters building, supervision of the annual convention, administrative liaison with the American Medical Association and county medical societies, and the rendering of administrative services to certain Councils and Committees of the Association.

Executive Office

The administrative structure of the Executive Office was continued as during the previous year and was divided into the Administrative Department, Mrs. Zoe Pack, Director; Public Relations Department, Mr. Eugene L. Nixon, Director; Legislative Department, Mr. Alvin D. James, Director; Publications Department, Mr. Thomas R. Jarvis, Director; and Special Services, Mrs. Mae Mason. The various duties, activities, and Council and Committee assignments were allocated to these departments. Additional personnel of the Executive Office are Mrs. Wanda Bain, Miss Margaret Brown, Mrs. Rita Fitzgerald, Miss Frances Pesce, Mrs. Louise Rader, Mrs. Ann Seales, Mrs. Helen Walker, and Mr. Henry L. Maree.

Mr. Harry T. Gray of the firm of Marks, Gray, Yates, Conroy & Gibbs continued to serve as legal counsel for the Association, and Mrs. Edith B. Hill as Editorial Consultant. Lucas and Herndon are the Association's Certified Public Accountants.

Activities

ADMINISTRATIVE ASSISTANCE for the Officers, Board of Governors, standing Councils and special Committees of the Association, maintenance of proper records and files, assistance to county medical societies in planning and implementing programs, and liaison with other national and state medical and lay organizations composed a major portion of the activities of this past year as in previous years. Administrative assistance has also been provided to special groups such as the Committee on Medicine and Hospitals, Florida Joint Council to Improve the Health Care of the Aging, Florida Committee on Rural Health and Florida Joint Committee for the Improvement of Patient Care.

FIELD SERVICES comprised one of the major activities of the Executive Director, Public Relations Director and Legislative Director during the year. Work was continued with component county medical societies, legislators, news media and other organizations in the interest of liaison and carrying out the programs of the Association.

THE JOURNAL of the Florida Medical Association report covers the 12 issues ending with December 1961. There were 55,605 copies printed, which is an increase of 4,005 over the previous year. Income from advertising for the fourth consecutive year has been adequate to cover the cost of printing, engraving, paper and drayage incurred in publishing The Journal.

THE FLORIDA MEDICAL DIRECTORY was compiled and 5,600 copies were printed. Each dues-paying member of the Association was furnished a complimentary copy. An advertising agency was retained in early 1962 in an attempt to increase revenue to the Association from Directory advertising.

BRIEFS were prepared and sent to all members of the Association whenever the need for dissemination of information to the entire membership warranted. Six issues of Briefs were published during the year. Numerous special bulletins were directed to members of the Association as the project of program warranted.

ANNUAL MEETING required, as in the past, continued attention to the details, records and correspondence in connection with the selection of the scientific program, speakers, technical and scientific exhibitors and other details.

ACCOUNTING AND PURCHASING procedures for the entire organization are maintained on a monthly as well as an annual basis. The posting and crediting of all dues, and acknowledgments to members, the American Medical Association and the county societies as well as the banking are handled in an efficient manner. Daily balances are also maintaining and statistical data are readily available.

SPECIAL PROJECTS carried out during the year consisted primarily of fair exhibits, science fairs, rural health, and promotion of the Florida Medical Foundation. The sixth annual Association awards for medical aptitude at the Florida State Science Fair were presented in 1962.

PHYSICIAN PLACEMENT service involved personal interviews, a large volume of correspondence with physicians seeking locations, field contacts and an increased correspondence with communities seeking medical care. Physician placement service during the past year provided assistance to physicians inside and outside the state seeking Florida locations, to Florida physicians seeking associates and to communities in need of additional medical coverage. During the year an average at all times of approximately 100 locations and more than 300 physicians necessitated a heavy volume of correspondence, personal interviews and field visits.

LEGISLATION received special emphasis again this year through assisting the Council on Legislation and Public Agencies in carrying out the Association's program regarding national and state legislation and liaison with governmental agencies regarding health services. Many special projects have been implemented in regard to defeating the King-Anderson type of legislation.

PRESS RELEASES on various phases of the 1961 Annual Meeting furnished to the state's newspapers and complete press facilities maintained during the meeting resulted in excellent state coverage. Special press releases regarding the Association's activities or actions were prepared and distributed during the year as warranted. It is gratifying to note that a high percentage of Association releases was published with little or no alteration by the press. The Association's weekly health column service, "Health Topics," now enters its thirteenth year and still maintains high popularity among the weekly newspapers publishing it regularly.

RADIO AND TELEVISION stations were provided with transcribed programs and films obtained largely from the American Medical Association. Assistance was also furnished to county medical societies in producing local programs. A special advertising campaign was conducted in the counties comprising the Fifth Congressional District.

MOTION PICTURES provided by the American Medical Association were scheduled and obtained for showing to medical and nonmedical groups.

LITERATURE published by the Association and the American Medical Association, such as pamphlets, booklets, and brochures, was distributed in extra large quantities to medical societies and other groups, individual physicians and the public at large through waiting rooms, fair exhibits and other activities. Special emphasis has been placed upon distribution and utilization of literature outlining the positive program of American medicine on medical service for the aged and arguments against tying medical care for the aged in with the Social Security system.

MEDICARE required a great deal of administrative assistance again this year in processing the correspondence and reports on claims, together with processing of committee minutes and directives.

FLORIDA MEDICAL FOUNDATION received its entire administrative service needed to function from the staff of the Association. The Executive Director of the Association also serves as Executive Secretary of the Foundation.

SPECIALTY GROUPS approved by the Association have been eligible to receive administrative assistance from the Executive Office since January 1, 1960. Seven specialty groups currently are utilizing this service. The work involved has mushroomed during the past year. Services given the specialty groups duplicate in miniature many of the services rendered by the association to its members, such as processing new members, publishing rosters, collection of dues, bookkeeping services, processing of correspondence, publishing and mailing newsletters, etc.

SPECIAL PROGRAMS OF THE ASSOCIATION requiring attention during the year were servicing of the Association's insurance programs and the Florida Medical Association Investment Trust.

INDIVIDUAL ASSISTANCE was provided, whenever possible, to each member of the Association requesting it.

LUCAS & HERNDON
Certified Public Accountants
Jacksonville 7, Florida

January 8, 1962

Board of Governors
Florida Medical Association, Inc.
Jacksonville, Florida

Gentlemen:

We have made an examination of the books and records of

FLORIDA MEDICAL ASSOCIATION, INC.
— JACKSONVILLE, FLORIDA

as of and for the year ended December 31, 1961, and submit herewith the report thereon, consisting of the three exhibits and two schedules listed in the foregoing Index.

This report was prepared on a cash receipts and disbursement basis, modified by depreciation and inventory adjustments, in a manner similar to that of prior years. Also, this report reflects the Association's

present interest in certain assets of the Florida Medical Association Pension Trust For Employees, as of December 31, 1961. The values of the assets of the Trust shown herein, as well as the changes therein during the year under review, are those furnished by Title & Trust Company of Florida, Jacksonville, Florida, Trustee, without independent audit thereof by the undersigned.

Reflected in the Statement of Financial Condition, Exhibit "A", are certain custodial bank accounts maintained in the name of Florida Medical Association in connection with certain members insurance plans, and are used as clearing accounts only, solely in the transmission of insurance premiums of members under the plan to insurance companies and also conversely in the remittance of premium refunds from the insurance companies to certain of the members covered by the plans. Balances shown herein as of December 31, 1961 are those independently reported to the undersigned by the depositories. The transactions of these accounts and the activities of these plans, are administered by March & McLennan, Incorporated, Atlanta, Georgia, and are not included in this report.

The examination was made in accordance with generally accepted auditing standards, and according included such tests of the accounting records and such other auditing procedures as were deemed necessary under the circumstances.

In our opinion, subject to the preceding paragraph relating to transactions in certain custodial insurance bank accounts, the accompanying Statement of Financial Condition and related Statements of Net Worth and Operations presents fairly the financial position of Florida Medical Association, Inc. at December 31, 1961 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Respectfully submitted,
s/ Lucas & Herndon

STATEMENT OF FINANCIAL CONDITION
December 31, 1961
FLORIDA MEDICAL ASSOCIATION, INC. — JACKSONVILLE, FLORIDA

ASSETS

EXHIBIT "A"

CURRENT ASSETS				
Cash On Deposit In:				
Checking Accounts:				
Atlantic National Bank	$ 7,896.31			
Florida National Bank	1,013.92	$ 8,910.23		
Savings Accounts:				
American National Bank	11,826.41			
Atlantic National Bank	23,047.59			
Barnett National Bank	26,590.44			
Central National Bank	4,381.66			
Florida National Bank	9,397.26			
First Federal Savings and Loan Association	11,328.38	86,571.74		
Petty Cash Fund		200.00		
Total Cash			$ 95,681.97	
Deposit — Universal Travel Plan			425.00	
Inventory — Stationery, Postage and Supplies			2,840.33	
TOTAL CURRENT ASSETS				$ 98,947.30
INVESTMENTS				
U. S. Treasury Bonds — 2½% Interest:				
Due 1962-67 (Face Value $1,000.00) —				
At Cost		978.44		
Due 1967-72 (Face Value $15,000.00) —				
At Cost		15,176.93	16,155.37	
Association's Interest In Employees Pension Trust:				
Cash Surrender Values — Life Insurance Policies		11,716.00		
Advance Premiums Paid		27,293.46		
Cash Funds In Trust Account		-0-	39,009.46	
TOTAL INVESTMENTS				55,164.83
OTHER ASSETS				
Custodial Insurance Bank Accounts — Contra:				
Atlantic National Bank			2,820.99	
Barnett National Bank			876.41	
TOTAL OTHER ASSETS				3,697.40

FIXED ASSETS Description	Cost	Accumulated Depreciation	Book Value	
Land	$ 73,347.95	-o-	$ 73,347.95	
Building	122,708.52	19,633.38	103,075.14	
Furniture and Equipment	46,997.12	29,648.01	17,349.11	
Totals	$243,053.59	$ 49,281.39	$193,772.20	
FIXED ASSETS — NET				193,772.20
TOTALS ASSETS				$351,581.73

EXHIBIT "B"

LIABILITIES AND NET WORTH

LIABILITIES	
Custodial Escrow Liability —	
Members Insurance Plans — Contra	3,697.40
NET WORTH	
Net Worth — Exhibit "B"	347,884.33
TOTAL LIABILITIES AND NET WORTH	$351,581.73

STATEMENT OF NET WORTH
Year Ended December 31, 1961

FLORIDA MEDICAL ASSOCIATION, INC. — JACKSONVILLE, FLORIDA

BALANCE—JANUARY 1, 1961	$331,875.96
ADDITIONS—CURRENT YEAR	
Net Excess of Income Over Expenses— Exhibit "C"	16,008.37
BALANCE—DECEMBER 31, 1961—To Exhibit "A"	$347,884.33

EXHIBIT "C"

STATEMENT OF OPERATIONS
Year Ended December 31, 1961

FLORIDA MEDICAL ASSOCIATION, INC. — JACKSONVILLE, FLORIDA

INCOME			
1961 Dues:			
Active Member Dues	$141,060.00		
Associate Member Dues	6,500.00		
Total 1961 Dues—Schedule C-2	147,560.00		
1961 Entrance Fees—Schedule C-2	3,770.00	$151,330.00	
1962 Dues and Entrance Fees—Schedule C-2		7,430.00	
1960 Dues—Accepted in 1961 By Board Action		1,575.00	
Advertising Income:			
Journal	43,360.08		
Directory	946.00	44,306.08	
Technical Exhibit Income		19,470.00	
Directory Sales		1,746.00	
Medicare Program—Reimbursements		2,438.15	
Special Services—Reimbursements		5,449.79	
Interest Income		3,068.24	
Journal Subscriptions and Sales		609.90	
Net Increment In Values of Employee Pension Trust Assets:			
Cash Surrender Value—Life Insurance Policies	584.59		
Advance Premiums Paid	2,292.61		
Cash Funds In Trust Account	1,185.42	1,691.78	
TOTAL INCOME			$239,114.94
EXPENSES—Schedule C-1			
General		94,244.93	
Executive Director		19,163.38	
Administrative		37,133.52	
Public Relations		17,315.38	
Publications		21,293.29	
Legislative		17,631.44	
Building		16,324.63	
TOTAL EXPENSES			223,106.57
NET EXCESS OF INCOME OVER EXPENSES—To Exhibit "A"			$ 16,008.37

"Mr. Speaker, I move the adoption of the Presidential Address, which was so characteristic of the past life of the speaker, and of the service that he has rendered to the Florida Medical Association in the past year."

Dr. Peek: "The Speaker takes the privilege of accepting that in order without motion."

Dr. Jelks: "The report of the Committee on Archives, which is included in the Delegates' packets, and the supplemental report of the Committee on Archives, as presented at the First Meeting of the House of Delegates, are approved. We would like to include in this item Resolution 62-25, presented by Escambia County as a memorial to Dr. Herbert L. Bryans.

"We would like to move the adoption of these reports and this resolution in honor and in memory of those who have gone before us; I move that we stand and observe a moment of silence in memoriam to our members in the past."

The delegates rose and paid silent tribute to the late members of the Association.

Committee on Archives

CLIFFORD C. SNYDER, M.D., *Chairman*

Again this year, the Committee on Archives has continued its efforts in completing the archives data on the membership of the Association, having covered the 50-60 year group during the year. Eight hundred seventy-nine doctors in this group were contacted by mail and 391 have completed the necessary forms and returned them for permanent filing in the historical records of the Association. Any member in this age group who failed to supply this information is urged to do so at his early convenience. Many of the members included photographs relating to early practice, family, etc.

At the annual meeting of the Association last year the Committee on Archives presented an exhibit on "A Comparative Review of the Methods of Practicing Medicine—Then and Now." Our exhibit was selected for one of the 10 merit award ribbons, as presented by the group of judges composed of a committee from the Board of Past Presidents of the Association. We were most appreciative of this recognition.

It is the hope of our Committee to continue the project of complete Archives data on the entire membership of the Florida Medical Association and it is our intention to cover the 40-50 year group during the coming year. We want to take this opportunity to express our appreciation to all of those members who have participated in this project.

During the year the following members of the Association were lost through death and their obituaries, wherever possible, have been published in The Journal of the Florida Medical Association. We have also included in this list those deaths which had not been reported to us previously.

November 1960	
Frank V. Chappell	Hillsborough
March, 1961	
L. H. Paul	Washington-Holmes
April, 1961	
Alfred W. Norris	Putnam
May, 1961	
E. Borland Gill	Broward
N. Alice Sheldon	Dade
George E. Terezakis	Orange
June, 1961	
John M. Baber	Palm Beach
Nelson M. Black	Dade
Herbert L. Bryans	Escambia
Hollis C. Ingram	Orange
Oliver L. Jones	Palm Beach
Roy Ray	Volusia
William C. Williams Jr.	Palm Beach
July, 1961	
David R. Rothrock	Dade
Joseph J. Trombley Jr.	Broward
Paul L. Youmans	Washington-Holmes
August, 1961	
Frank C. Jones	Alachua
Howard F. Lawrence	Pinellas
Willard M. Taylor	Broward
September, 1961	
George D. Hopkins II	Lee-Hendry
Robert M. Sasso	Columbia
October, 1961	
Charles F. Henley	Duval
Wilburn Lassiter	Alachua
Charles O. Sayres	Volusia
November, 1961	
Juel M. Baker	Dade
Ulfar Jonsson	Dade
Michael J. Lingo	Bay
R. Sam Mosley	Dade
December, 1961	
Norman E. Williams	Volusia
January, 1962	
Joseph L. Chilli	Duval
Hugh W. Wade	Pinellas
February, 1962	
J. Frank Wilson	Duval
March, 1962	
Irby H. Black	Suwannee-Hamilton-Lafayette
Daniel H. Mathers	Seminole
Herman Watson	Polk
April, 1962	
S. Allen Clark	Polk

* * * * *

Date of Death Unknown:	
Edwin A. Johnson, (Col.)	Lee-Hendry

Supplemental Report

It is with great pride that our Committee is able to announce that through the untiring efforts of many of our Association's members, and in particular Dr. William M. Rowlett of Tampa, the grouping of photographs of past presidents for the headquarters building of the Association has been completed with one exception.

Just this week, Dr. Rowlett sent us a copy of a photograph of the late Frank H. Caldwell, M.D., who was president of the Association in 1893. This photograph was found in the possession of ex-Sheriff Will A. Spencer, an 86 year old gentleman whose sister, Miss Mary E. Spencer, was married to Dr. Caldwell.

All assistance possible will be welcomed in our efforts to obtain the last photograph we are seeking—that of the late J. W. Hicks, M.D., of Orlando, who was president of the Florida Medical Association in 1887.

Dr. Jelks: "I am sure we all remember the words of our Speaker as he opened this convention. I move that we adopt everything he said."

Dr. Peek: "As our Speaker said, "Always stand up and be heard." If there are any objections, we would like to hear them at this time; if not, so ordered."

"Resolution 62-3, Malpractice and Negligence Suits, is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Resolution 62-3

Malpractice and Negligence Suits
St. Johns County Medical Society

WHEREAS there has been a marked increase in the number of malpractice and negligence law suits in Florida, and

WHEREAS experience in other states has shown the value of the State Medical Association Committee study, and make recommendations concerning the past conduct of such a case; which has been of proven value in such cases, be it therefore

RESOLVED, That the Florida Medical Association explore the need for, and feasibility of, such a committee in the State of Florida.

"The portion of the report of the Council on Medical Services concerning establishment of a Committee on Hearing was referred to our Committee by the Speaker at the First Meeting of the House of Delegates. This portion of the report of the Council on Medical Services is approved and the Reference Committee recommends the following amendment to the By-Laws to establish such a committee:

Amend Chapter IX, Section 1 by addition of the word 'Hearing' so that the paragraph on Council on Medical Services reads:

'COUNCIL ON MEDICAL SERVICES: Committees on Aging, Blood, Child Health, Emergency Medical Service, Hearing, Indigent Care, Labor, Maternal Health, Mental Health, Public Health, Rural Health, and Vision.'

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

A request from the Florida Society of Ophthalmology and Otolaryngology and also from the Florida Medical Association Committee on Child Health that a Florida Medical Association Committee on Hearing be formed has been considered. The Council believes this new committee is needed and recommends that the By-Laws be amended to create a Committee on Hearing.

Amend Chapter IX, Section 1 by addition of the word "Hearing" so that the paragraph on Council on Medical Services reads:

"COUNCIL ON MEDICAL SERVICES: Committees on Aging, Blood, Child Health, Emergency Medical Service, Hearing, Indigent Care, Labor, Maternal Health, Mental Health, Public Health, Rural Health, and Vision."

"Resolution 62-2, Amendment to By-Laws—American Medical Association Delegates, is approved with the recommendation of the Reference Committee that the words "or until the delegate is able to resume his duties" be added to the last sentence in paragraph 5 of this resolution.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

Resolution 62-2

Amendment to By-Laws—
American Medical Association Delegates
Alachua County Medical Society

WHEREAS the By-Laws of the Florida Medical Association provide that if a delegate from the Florida Medical Association to the American Medical Association vacates his delegacy through disability or for any reason, "such vacancy shall be filled by appointment by the President approved by the Board of Governors. Such appointment shall be effective only until the next meeting of the House of Delegates at which time the office shall be filled by election," and

WHEREAS it makes no sense whatever to have elected alternate delegates to the American Medical Association if they are not, in fact, to replace the elected delegate in case it is necessary for him to vacate his position; be it therefore

RESOLVED, That the By-Laws of the Florida Medical Association, Chapter VI, Section 10, Paragraph 2, be amended to read:

"In the event a vacancy occurs for any reason in any elective office, other than delegate to the House of Delegates of the American Medical Association, such vacancy shall be filled by appointment . . . etc.

"In the event that a vacancy occurs in the position of delegate to the House of Delegates of the American Medical Association, such vacancy shall be filled by promotion of the elected alternate delegate to the position of delegate for the rest of the unexpired term of said delegate, or until the delegate is able to resume his duties.

"In the event that both the elected delegate from the Florida Medical Association and his alternate are unable for any reason to perform as delegate to the American Medical Association, then such vacancy shall be filled by appointment by the President approved by the Board of Governors. Such appointment shall be effective only until the next meeting of the House of Delegates at which time the office shall be filled by election."

"Your Reference Committee has substituted Resolution 62-2 for Resolution 62-23, Amendment to the By-Laws—American Medical Association Delegates.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

"Your Reference Committee recommends the deletion of the second paragraph of Resolution 62-33, Judicial Procedure. The first paragraph of the resolution is approved.

"Mr. Speaker, I move the adoption of this portion of the report."

Dr. William W. Thompson of Walton-Okaloosa-Santa Rosa, spoke against deletion of the second paragraph of the resolution.

Dr. Jelks elucidated on the recommendation of the Reference Committee, saying that the Committee had considered this at some length, and felt that there would be times when it would be

necessary and to the best interest of the Association not to be limited if three or four individuals were implicated in the same matter.

Dr. Thompson: "I would like to move that we approve the second paragraph and add the words 'wherever feasible' after the word 'individuals,' and this would give the necessary latitude to the investigating body."

No discussion; no objections, motion to amend carried.

Dr. Peek: "We will now vote on the report as amended."

No discussion; no objections, motion carried.

Resolution 62-33

Judicial Procedure
Walton-Okaloosa-Santa Rosa County Medical Society

RESOLVED, that the Board of Governors of the Florida Medical Association, or the Judicial Council of the Florida Medical Association, or that any other committee of the Florida Medical Association, be requested to keep the component societies affected informed of any investigations or pending actions that may involve the members of the component society; be it further

RESOLVED, That members of component societies that are investigated be investigated and reported on as individuals wherever feasible and not lumped into arbitrary groups.

"Resolution 62-16, Amendment to the By-Laws — Council on Specialty Medicine, is approved with amendment by the Reference Committee. We recommend that the term of membership on the Council on Specialty Medicine be increased to four years rather than three, as set forth in the resolution, and that the words "from the senior members of the Council" be deleted from the last paragraph of the resolution.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussions; no objections, motion carried.

Resolution 62-16

Amendment to the By-Laws—Council on Specialty Medicine
Council on Specialty Medicine

That Chapter 9, Section 2, Paragraph 10 of the By-Laws of the Florida Medical Association be amended to read, "Specialty Medicine Committees — Each committee under the Council on Specialty Medicine shall consist of one member appointed by the President of the Association in consultation with the respective medical groups to represent each medical specialty for a term of four years. The initial terms shall be staggered to provide for a minimum of change of members in any one year.

Sub-Committee on Specialty Groups — Shall be composed of one member appointed annually by the President of the Association in consultation with the President of each specialty group officially recognized by the Association.

The Chairman of the Council shall be appointed by the President.

"To accomplish the intent of Resolution 62-22, Amendment to the By-Laws, which is relative to the length of term of the Speaker of the House, your Reference Committee recommends that the last sentence of Section 7, Chapter VI pertaining to the Speaker of the House be deleted; your Reference Committee further recommends that the last sentence of Section 8, Chapter VI pertaining to the Vice Speaker of the House be deleted. We discussed this matter a long time and the Committee felt that the House of Delegates has enough backbone to replace a man when it wishes.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Section 7. SPEAKER OF HOUSE OF DELEGATES

The Speaker of the House of Delegates shall be elected by the House of Delegates from its membership and shall preside over all meetings of the House and shall determine the number and times it shall convene during any one meeting. In consultation with the Speaker, the President shall appoint a credentials committee and all reference committees and shall designate the chairman of each. It is the responsibility of the President to provide a presiding officer for the House of Delegates in the event the Speaker is unable to serve and a Vice Speaker is unavailable.

Section 8. VICE SPEAKER OF HOUSE OF DELEGATES

When deemed advisable, a Vice Speaker may be elected by the House of Delegates from its membership. He shall assist the Speaker and serve in the event of his absence or disability. He shall be an ex officio member of the House of Delegates.

"The Reference Committee has reviewed Resolution 62-36, Amendment to the By-Laws, Speaker of the House, which concerns removing the vote on the Board of Governors from the Speaker of the House. After careful review of the By-Laws, the Committee cannot see that it would help the House of Delegates or the Board of Governors to approve it.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Dr. Jelks: "Mr. Speaker, your Reference Committee has approved the foregoing amended changes in the By-Laws of the Association with the understanding that they are subject to review by the Association's legal counsel.

"Mr. Speaker, I move the adoption of this entire report as amended."

No discussion; no objections, motion carried.

REPORT OF REFERENCE COMMITTEE No. IV

Legislation and Miscellaneous

Dr. Edward W. Cullipher: "It is apparent that three of your four Reference Committee chairmen are suffering from the same disease. It is known technically as 'alopecia damn-nearis totalis.'

"Your Reference Committee gave careful consideration to items referred to it and makes the following report:

"The report of the Council on Legislation and Public Agencies as printed in the Handbook, its supplement, and the supplement to the report of the Committee on State Legislation which comes under this Council, are approved.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Council on Legislation and Public Agencies

H. PHILLIP HAMPTON, *Chairman*

Council:

The Council on Legislation and Public Agencies has been concerned nationally with implementation of the Kerr-Mills Law and opposition to any plan to provide health care for all social security recipients financed by the Social Security tax.

Full benefits of the Kerr-Mills Law have not been realized in Florida because of a provision in the Appropriations Act prohibiting participation until there is Congressional action amending the "no-residency requirement" in the Law. The costs to federal, state and county governments in providing health care for the needy sick in Florida in 1960 and 1961 are illustrated in the chart which is included in the Delegates' packets; this chart graphically compares the expenditure distribution in 1961 had the benefits of the Kerr-Mills Law been applied in Florida.

A supplemental report on the outcome of the King Bill will be presented.

The report and recommendations of the Committee on State Legislation, outlining the Association's recommended state legislative program for the 1963 Florida Legislative Session, are to be included in the Delegates' packets.

COMMITTEES:

1. State Legislation
   Subcommittee on Liaison and State Agencies
2. National Legislation

Subcommittee on Liaison with Federal Agencies: The Committee has had no formal meeting during the year, but plans to have one at the Florida Medical Association Annual Meeting this year.

The services of the Committee in mediating disagreements between the Veterans Administration and members of the Florida Medical Association were offered to Dr. Earp, Clinical Director of Veterans Administration, and all disputes arising between the Administration and the Association have been forwarded to the Association. These have been chiefly minor, and in most instances, a satisfactory compromise has been obtained. The Committee has received several requests for re-evaluation of the Fee Schedule, which is to be taken up when the Committee meets. The last major revision concerning the Fee Schedule was made approximately five years ago.

There have been no activity reports received from the other components of the Council on Legislation and Public Agencies.

Recommendations of Council for House of Delegates' approval:

I. Encourage implementation of Mills-Kerr Law by:
   (a) Recommend to Congress changes in the law to:
      1. Permit voluntary county participation in the state plan (local option).
      2. Require no less stringent residency regulations than in other state welfare plans.
   (b) Promote a state plan to:
      1. Aid needy elderly in the purchase of adequate hospital insurance.
      2. Use federal reimbursement under the Mills-Kerr Law to aid in providing medical care for the aged through the Florida plan of health service for the indigent.

II. Establish under the Florida Medical Foundation a program of continuing evaluation, and monitoring of the tax-supported health care program in Florida, such as:
   (a) Audit the expenditures for drugs to public assistance recipients in the five counties having the highest expenditures per eligible recipient and the five counties having the lowest expenditures.
   (b) Similar audit for hospital expenditures in the Hospital Service for the Indigent program.

It is further recommended that members of the Florida Medical Association who have disagreements with the Veterans Administration forward reports of them to the appropriate member of the Subcommitttee on Liaison with Federal Agencies if any assistance is desired. It is also recommended that any suggestions referable to the Veterans Administration Fee Schedule also be forwarded so that they may be considered by the member of the Subcommittee who is concerned with Veterans Administration.

Supplemental Report

In order to utilize fully the benefits of the Kerr-Mills Law in the Florida program of health care for the needy sick, it is recommended that the House of Delegates of the Florida Medical Association adopt a legislative program urging the Florida State Legislature to create:

1. A state plan to aid by partial payment of the monthly premium for adequate health insurance for the aged who have assets inadequate to provide for themselves in case of serious illness.
2. A state plan to permit federal reimbursement under Public Law 86-877 (Kerr-Mills) for expenditures made by the counties and state for aged needy sick under the existing Florida program of Health Services for the Indigent.

Supplemental Report of Committee on State Legislation

EDWARD R. ANNIS, *Chairman*

The Committee on State Legislation met on April 27, 1962, and at that time carefully considered the many legislative proposals submitted by the various specialty groups, component county medical societies, councils and committees of the Florida Medical Association and other organizations. In keeping with the approach of past years in developing the state legislative program, your Committee once more expressed unanimous concurrence that the Association's legislative program should not be one involving many and various items of legislation but be limited primarily to items which significantly affect the practice of medicine and are of major importance to the best interest of the public's health and welfare. Your Committee is of the opinion that legislative proposals

considered to be of secondary importance should be referred to interested organizations and state agencies affected and if support in the state legislature is desired by them, then the Association's assistance should be given.

For the 1963 session of the Florida Legislature, the Committee is pleased to offer the following as a recommended program for the Association:

1. Continued improvement and expansion of Florida's indigent care program by further support of legislative enactment and implementation of Public Law 86-877 (Kerr-Mills Law); and as a means to this end active support of adequate appropriation of state funds sufficient to provide a comprehensive health care program for indigent citizens of all ages.
2. Good Samaritan Legislation. Enactment of legislation to provide legal immunity for any licensed doctor of medicine who in good faith renders emergency care at the scene of an accident.
3. Privileged Communications. Enactment of legislation defining and establishing the right of privileged communication between patient and physician.

Recommendations regarding other proposals considered by the Committee:

4. Investigative studies to be confidential and privileged, as referred by the Committee on Maternal Health, was approved in principle with the resulting recommendation that the subject matter be referred to the appropriate reference committee for full hearing.
5. Surgical sterilization for medical and psychiatric indications is recognized by the Committee as a highly controversial issue involving violent emotional and divergent opinions and for this reason the Committee recommends that the subject matter not be considered further at this time.
6. Amendments to existing laws concerning abortion as referred by the Committee on Maternal Health, were carefully considered with the resulting recommendation that further consideration be deferred at this time.
7. Establishment of a hazardous substance labeling act for the State of Florida, as proposed by the Florida Pediatric Society, was considered with the resulting recommendation that in view of the interest and progress to date by the State Board of Health and the Department of Agriculture, the Florida Pediatric Society, as well as others, be encouraged to offer advisory assistance to these state agencies.
8. Establishment of a uniform state pound law was considered by the Committee with the resulting recommendation that the Association support this legislation provided the deans of the two medical schools have such legislation drafted and introduced, and prepare supporting data to justify its enactment.

The Committee on State Legislation recommends that the Association support other legislation considered by the medical profession to be in the best interest of the public's health and welfare and further recommends continued active opposition to all legislation adversely affecting the practice of medicine and the public's health and welfare.

The report of the Council on Medical Economics is approved as printed in the Handbook from its beginning on page 46 to the report of the Committee on Fee Schedules on page 49; the report of the Committee on Fee Schedules is amended as follows: Paragraph (3), line 6, a period be placed after the word "schedules" and the remainder of the paragraph be deleted. Page 50 is approved as printed. On page 51, paragraph (2), line 3, a period be placed after the word "principle" and the remainder of the paragraph be deleted; that paragraphs (4) and (5) be deleted; Item (7), resolution 1, that the last four words of paragraph 1 be deleted, and the entire second paragraph be deleted. The supplemental report of the Committee on Fee Schedules is approved as presented.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

Council on Medical Economics

FLOYD K. HURT, *Chairman*

Council:

As provided in the Charter and By-Laws of the Florida Medical Association, the Council on Medical Economics has under its jurisdiction the following Committees which are chaired by the named physicians. It is recognizable from the summary of activities that each Committee has been extremely active in discharging its assigned tasks.

1. Medicare Mediation Committee, Burns A. Dobbins Jr., M.D., Chairman
2. Committee on Members Insurance, Floyd K. Hurt, M.D., Chairman
3. Committee on Fee Schedules, Henry J. Babers Jr., M.D., Chairman
4. Committee on Industrial Medicine, Charles Larsen Jr., M.D., Chairman
5. Advisory Committee to Blue Shield, Ralph M. Overstreet Jr., M.D., Chairman
6. Committee on Commercial Health Insurance, Duncan T. McEwan, M.D., Chairman

Annual reports of the Committees' activities follow:

COMMITTEE ON HEALTH INSURANCE: The Committee reports favorable progress concerning implementation of Resolution 61-21, adopted by the 1961 House of Delegates, regarding the establishment of insurance review committees in all county medical societies. Many of the county medical societies that did not previously have committees functioning in this capacity have established committees which are now active. The activities of these local review committees will further establish better liaison between the doctors of the state and representatives of the prepayment health insurance industry.

COMMITTEE ON FEE SCHEDULES: The Committee held three meetings since the last meeting of the House of Delegates. These meetings were held on September 24, 1961, November 12, 1961 and January 12, 1962. On January 12, 1962 the Committee met jointly with the Council on Specialty Medicine, and held another joint meeting on the same date with the Council on Medical Economics.

During the year, major attention and consideration were given by the Committee to (1) revision of the Association's relative value study, and (2) correction of the existing inequities of the Workmen's Compensation Medical and Surgical Fee Schedule.

In compliance with the By-Laws, the Board of Governors designated the Committee on Fee Schedules to represent the Florida Medical Association on the newly appointed Conference Committee to the Florida Industrial Commission to study and revise the Workmen's Compensation Fee Schedule. The full Conference Committee, which includes an equal number of conferees representing Industry as well as a number of advisors, held its first discussion conference meeting on March 4, 1962 in Tallahassee. To date, the efforts of the Conference Committee have been made known to the Florida Medical Association membership in that the official notice of

the actions by the Florida Industrial Commission was circularized by the Association's news medium "Briefs." A supplemental report outlining recent activities of the Medical Fee Schedule Committee to the Florida Industrial Commission will be submitted and included in the Delegates' packets.

The Board of Governors' deliberations regarding the Committee actions and recommendations as developed by the joint meetings of November 12, 1961 and January 12, 1962 will be reported in the Committee's supplemental report.

COMMITTEE ON MEMBERS INSURANCE: The Committee did not meet formally during the past year; however, several important matters were acted upon.

Professional Liability Insurance: After extensive investigation and study by the Committee, the Board of Governors approved the Committee's recommendation that the Association sponsor a program of professional liability (malpractice) insurance protection. Premise liability coverage is also available as a supplement to this plan. An important feature of this program is the claims defense mechanism which is dependent upon the close cooperation maintained by the insured doctors and county and state committees, with all claims or incidents receiving both local and centralized attention. It is intended that the membership be kept apprised of all claims-producing situations through a planned educational program.

Currently, filings are pending before the Insurance Commission of the State of Florida requesting changes in the present policy (1) to eliminate the surcharge for partnership coverage and (2) to provide additional coverage for physician exposure while participating on tissue, grievance and other committees on which possible individual liability exposure may exist.

The membership was notified that this program was available effective October 1, 1961, and to date an enthusiastic response has been experienced.

Accidental Death and Dismemberment Program: Because of the extremely poor nationwide loss experience, the underwriter for this program desired to exercise its cancellation privilege effective March 3, 1962. Notices to this effect were mailed to each physician covered by this program and because of shortness of time, Marsh & McLennan, Inc., the Association's insurance administrator, was authorized on February 8, 1962 to place comparable coverage with another insurance carrier. A transfer of coverage was made, and those physicians previously covered by Columbia Casualty Insurance Company will continue to have comparable coverage underwritten by the Insurance Company of North America, effective March 3, 1962. No difficulty was encountered in this transfer in that participation continues to increase.

MEDICARE MEDIATION COMMITTEE: This report is made on a calendar year basis to coincide with the accounting procedures of the fiscal administrator, Blue Shield.

During the year six meetings were held and two telephone conferences. Attendance was excellent.

Blue Shield paid 10,480 claims to M.D.'s for a total of $899,692.24. This is an increase of approximately $172,000 over the amount paid in 1960. Of these claims, 417 (3.9 per cent) were referred to the county and state committees for consideration. The number of physicians participating was 1,827, or 182 more than in 1960.

The County Medicare Mediation Committees have been of tremendous assistance in the work of settling claims which required mediation. They have talked with the physicians involved and when necessary, have investigated hospital and operating room records. Through their efforts, valuable recommendations were made to the state committee. Their cooperation and assistance are greatly appreciated.

COMMITTEE ON INDUSTRIAL MEDICINE: The Committee on Fee Schedules replaced this Committee as the negotiating Committee for changes in the Workmen's Compensation Fee Schedule.

The Chairman of this Committee, who is also a member of the Committee on Fee Schedules, has been working with the Committee on Fee Schedules at numerous meetings in preparation for negotiations for a more equitable Workmen's Compensation Fee Schedule.

Much correspondence has been carried out with Mr. Paul Speh, Director of the Workmen's Compensation Division of the Florida Industrial Commission, in an attempt to correct the erroneous interpretations being made of the present fee schedule, particularly in reference to specialty consultations, follow-up visits, physiotherapy and preoperative and postoperative care.

The very excellent work of Dr. Thomas J. Bixler, acting as Medical Advisor to the Florida Industrial Commission, is beginning to bear fruit in solving some of these misunderstandings. The urgency of the correction of these interpretations was emphasized by the Committee on Fee Schedules at its meeting with the Industrial Commission and representatives of Industry in Tallahassee on March 4, 1962.

COMMITTEE ON ADVISORY TO BLUE SHIELD: During the year, the Association's Committee on Advisory to Blue Shield (Committee of 17) held two full Committee meetings and a two day informational meeting with the Blue Shield Board of Directors.

The Committee carefully considered the following important matters:

(1) Proposed Blue Shield rider covering outpatient diagnostic x-ray and laboratory services;
(2) Establishment of a Commission on Cost of Medical Care in Florida with membership consisting of two representatives each of the Florida Medical Association, Florida Hospital Association, Blue Shield of Florida, Blue Cross of Florida, and the commercial health insurance industry;
(3) Referral of the resolutions and other matters concerning health insurance, adopted by the 1961 House of Delegates, to the newly established Commission on Cost of Medical Care in Florida;
(4) Coordination of activities of local health insurance review committees.

The Committee extends its appreciation to Mr. W. J. Stansell for his untiring efforts in implementing the work of the Committee and in the interest of medicine.

Recommendations:

The Council on Medical Economics recommends that approval by the Association of the American Health Credit Plan, Inc. be deferred and that the matter be held in abeyance for further consideration because of the possible broad ramifications involving third party implication in the physician-patient relationship.

The Council on Medical Economics submits the following Committee recommendations:

COMMITTEE ON COMMERCIAL HEALTH INSURANCE

It is recommended that continued liaison be maintained with the Florida Health Insurance Council through the Committee on Commercial Health Insurance in order that matters of mutual concern may be considered.

COMMITTEE ON FEE SCHEDULES

(1) The Blue Shield Board of Directors be requested not to publish any relative values in any future handbooks;
(2) In view of the feeling of the Council on Specialty Medicine that it is "in agreement with the value of using relative value studies as an index for negotiating fees," the Committee reaffirms its previous approval to develop and use the relative value studies for such purposes;
(3) The action by the Council on Specialty Medicine that "any relative value studies when converted by the use of conversion factors into any negoti-

ated fee schedules, such fee schedules should be regarded as average fee schedules and not as maximum fee schedules."

(4) The action by the Council on Specialty Medicine that "the 1960 California Relative Value Study prepared by the California Medical Society be used as a guide for consideration, negotiation, decisions, etc., by the Florida Medical Association," be approved.

(5) The California Relative Value Study, its nomenclature, code numbers, ground rules, etc., with modifications to bring it in line for Florida, be adopted.

COMMITTEE ON MEMBERS INSURANCE

The Committee recommends approval of the following recommendations in an effort to further improve the Association-sponsored insurance programs:

Disability Income Plan:

Senior Income Plan—Presently the disability plan terminates coverage for participants on attainment of age 70 and for this reason it is recommended that broader coverage be made available under a separate policy for those insured physicians desiring to retain this type of insurance. In offering a *Senior Income Plan* as a supplement to the present disability program, there are several advantages, as follows:

(1) Loss experience can be expected to be higher under the Senior Income Plan and by issuing separate policies the stability of the Disability Income Plan will not be affected;

(2) Rating action for the Senior Income Plan can be accomplished without changing rates for the Disability Income Plan if loss experience for the over age coverage is excessive;

(3) Different plan benefits of the Senior Income Plan with a 30 day waiting period and maximum benefit period limited to one year accident or sickness could cause more misunderstanding by the insured if this coverage were extended under the same policy rather than converting to a separate policy.

Extended Disability Income Plan—This extended coverage is intended to broaden the present program and significantly make the plan more competitive. It is recommended that the Extended Plan—Lifetime Accident Sickness to Age 65 be offered in lieu of the Lifetime Accident—Five Year Sickness coverage. This proposed Extended Plan would necessitate an increase in premium over the current five year plan; however, it is felt that this coverage would be attractive enough beneficially to overcome the premium differential. Those physicians desiring to retain the five year sickness coverage may do so.

MEDICARE MEDIATION COMMITTEE

Again it is the recommendation of the Medicare Mediation Committee that the Florida Medical Association continue to cooperate in caring for the medical needs of the dependents of the Armed Services and extend its contract with the Office for Dependents' Medical Care. Only by so doing can we represent and protect the interests of approximately 1,800 members who participate in the program, settle differences on the local and state level rather than having them aired in Washington, and maintain good public relations with the many dependents of service men who live in our state.

COMMITTEE ON INDUSTRIAL MEDICINE

(1) That continued action be taken to immediately correct the erroneous interpretations of the present Workmen's Compensation Fee Schedule, particularly in reference to the specialty consultations, follow-up visits, physiotherapy, and preoperative and postoperative care;

(2) Establish a new equitable relative value fee schedule, which is a schedule of average fees to be used as a guide for Workmen's Compensation cases.

(3) Appointment of a Medical Board to work with Dr. Thomas J. Bixler of Tallahassee, and to act in an advisory capacity to the Florida Industrial Commission to aid in solving problems pertaining to fees in Workmen's Compensation cases.

COMMITTEE ON ADVISORY TO BLUE SHIELD

(1) Approval of the recommendation of the Council on Specialty Medicine that Blue Shield adopt the 1960 California Relative Value Study and ground rules as modified by the joint meetings of the Council on Specialty Medicine and the Committee on Fee Schedules, with the exception that the A&A request (re orthopedists) be deleted and that relative value figures be substituted, and that acceptance shall not apply to negotiations with other agencies.

(2) That the portion of the proposed Senior Citizens Contract concerning special low income provisions be accepted in principle.

(3) Rejection of the proposed rider covering diagnostic x-ray and laboratory services submitted by Blue Shield, with the Blue Shield Board of Directors to be advised that the proposal does not follow the advice of the unanimous decision made by the Committee at its meeting on October 15, 1961.

With further regard to the proposed rider covering diagnostic x-ray and laboratory services, it is recommended that the President of Blue Shield or other appropriate representatives of Blue Shield make every effort to inquire of the Insurance Commissioner regarding possible exclusion of those who are not doctors of medicine and seek to obtain a clearer definition of physicians who are to participate in this rider.

(4) Unanimous and wholehearted commendation of Dr. Ralph M. Overstreet Jr. for the manner in which he has served as Chairman of the Committee on Advisory to Blue Shield for the past year.

(5) Resolution 1:

RESOLVED, That in order that all health insurance programs can function as intended, the individual county societies be encouraged to change their by-laws or establish committees to scrutinize fee inequities within their local county societies.

(6) Resolution 2:

RESOLVED, That in the event the implementation of an old age program on a national basis by Blue Shield is coupled with Blue Cross, the advertising campaign incorporate in it proper emphasis on the fact that the physicians are accepting fees at a 30-50 per cent reduction for those qualifying for service benefits in order to make this program successful, and through adequate public relations by professionals this be phrased in such a manner toward efforts that the physician image may again be restored to its past respected levels, and be it further

RESOLVED, That in this advertising coverage a direct attack be made on all the socialistic trends now in the making at the governmental level.

Supplemental Report

The Committee on Fee Schedules is pleased to offer the following supplemental information regarding the Committee's recent activities.

The Board of Governors at its meeting on April 1, 1962, unanimously approved the following Committee recommendations:

1. That the Blue Shield Board of Directors be requested not to publish any relative values in any future handbooks;

4. That the action by the Council on Specialty Medicine that "the 1960 California Relative Value Studies prepared by the California Medical Society be used as a guide for consideration, negotiation, decisions, etc., by the Florida Medical Association" be approved;

5. That the California Relative Value Study, its nomenclature, code numbers, ground rules, etc., with modifications to bring it in line for Florida be adopted.

The Committee (as one of the most active committees of the Association) met for the fourth time on April 29, 1962, at which time major attention was directed to final review of proposed recommendations for revision of the Association's relative value study. After carefully considering each individual recommended change as submitted by the various specialty societies, the Committee concurs that the proposed draft of the revised relative value study should be presented to the various specialties via the Council on Specialty Medicine for ratification. Prior to publication any further change to be considered by the Committee will necessitate written documentation.

At the same meeting consideration was also given to the current problems concerning Workmen's Compensation. In this regard the Committee feels that much progress has been made through the efforts of the Medical Fee Schedule Committee to the Florida Industrial Commission and that the Commission has become more attentive to the physicians' point of view. It is expected that the problems regarding consultation and referral of Workmen's Compensation cases will be resolved in the near future with consultations to be administered on an A&A basis, thereby permitting more flexibility in the Workmen's Compensation Fee Schedule. In view of the progress made, the Committee concurs that such conference discussions should continue.

The Committee continues to maintain sincere efforts in order to achieve desired results for the good of all medicine; however, it is recognized that existing internal bickerings must first be resolved. Without unanimity among the ranks of medicine, such objectives cannot be accomplished.

"The report of the Council on Special Activities is approved as printed in the Handbook."

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Council on Special Activities

WILLIAM C. ROBERTS, *Chairman*

Council:

The reports of the Committees under this Council follow. They are brief and self explanatory.

The Board of Past Presidents has no report to make, except to call to the attention of the members the passing of past president Herbert L. Bryans of Pensacola on June 8, 1961.

The Council on Special Activities wishes to thank the respective committees, their chairmen and members for their efforts and cooperation in making this year a successful and fruitful one. The Council is grateful for the brief and concise reports.

COMMITTEES:

1. Advisory to Woman's Auxiliary

Two meetings were held with the Woman's Auxiliary, one at its Fall board meeting in Orlando, and the other at its meeting in January at Jacksonville. The Advisory Committee has been called upon repeatedly this year, and many of the problems arising needed immediate advice. Decisions were made by correspondence, telephone conversations (both local and long distance) or personal interviews with the officers of the Auxiliary. The Advisory Committee has observed the Auxiliary in action on numerous occasions this year and wishes to compliment its officers and committee chairmen for the way in which they have assumed their responsibilities.

2. Board of Past Presidents

3. AMA House of Delegates

All four Delegates attended and were active in the proceedings of the meetings of the AMA House of Delegates in New York at the June meeting, and at Denver in November. Each of the four Delegates is a member of one or more Councils or Committees of the American Medical Association and have participated in four or more meetings during the past year.

Reports of the proceedings at both meetings have been widely summarized and published in the American Medical Association News and The Journal of the Florida Medical Association.

4. Liaison with County Medical Societies

The activities of the county medical societies for this year, as far as I know, have been quiet and pleasant. One county society was sued for not accepting into membership a doctor of questionable professional character. The society won the suit. The doctor is not yet a member of organized medicine.

The five county medical society composed of Leon-Gadsden-Liberty-Wakulla-Jefferson inquired into the method of splitting up the society for what appeared to be sound reasoning with the suggestion that Gadsden and Liberty compose one society and Leon-Wakulla-Jefferson the other. The process of accomplishing this was directed to them.

The Florida Medical Association Public Relations Department is planning a campaign toward emphasizing the importance of individual members giving more time to society and hometown public relations activities.

Recommendations of Council for House of Delegates' approval:

None, except grant the wishes of the Five County Medical Society (Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society) to split the society as the members see fit if their application is in order.

"Resolution 62-1, Quackery, is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Resolution 62-1

Quackery

Alachua County Medical Society

WHEREAS Florida is a rapidly growing state and the percentage of quacks, cultists, healers, etc., can be expected to increase markedly, and

WHEREAS these groups are already doing considerable damage to the health of the citizens of Florida; therefore, be it

RESOLVED, That the Florida Medical Association through its House of Delegates direct the Legislative Committee to study this problem and submit an appropriate legislative bill through the proper channels to correct this problem.

"We recommend that Resolution 62-4—Auto License Plates, be disapproved.

"Mr. Speaker, I move the adoption of this portion of the report."

Dr. Ralph Herz of Monroe spoke in favor of this resolution and moved adoption of the resolution.

By voice vote, the recommendation of the Reference Committee was approved.

"Resolution 62-8, Privileged Communications and Records, is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Resolution 62-8

Privileged Communications and Records Jackson-Calhoun County Medical Society

WHEREAS it is the desire of the medical staff of most hospitals to properly police themselves, in an effort to assure the public of adequate and satisfactory medical care, and

WHEREAS the usual method of this policing is through Credentials, Surgical, Tissue, Medical Records, and Audit Committees, as well as sectional and general staff meetings and conferences, and

WHEREAS records and minutes of these various meetings are frequently inadequately kept due to both well founded and unfounded fears of these records becoming a part of unfounded litigation, thus stultifying the efforts of the physicians to adequately police themselves; therefore now be it

RESOLVED, By the Jackson-Calhoun County Medical Society Incorporated that we believe the records and minutes of the various segments of the medical staff should be considered confidential information, and should under no circumstances be made available to a court of law except upon consent of the medical staff and of the involved persons, and furthermore be it also

RESOLVED, That the Jackson-Calhoun County Medical Society Incorporated request that the legislative committee of the Florida Medical Association take steps to secure the passage of such legislation as is necessary to insure that these records may remain confidential.

The Committee recommends that Resolution 62-9, Tumor Clinics, be disapproved.

"Mr. Speaker, I move the adoption of this portion of the report."

Dr. James T. Cook Jr. of Jackson-Calhoun, Dr. Seymour L. Alterman of Dade and Dr. Miles J. Bielek of Broward spoke in favor of adoption of the resolution; Dr. Ashbel C. Williams and Dr. Sam C. Atkinson of Duval spoke against the resolution.

By voice vote, motion was carried to uphold the recommendation of the Reference Committee and disapprove Resolution 62-9.

"Resolution 62-13, Legal Immunity for Physicians of Florida who Render Medical Aid as Good Samaritans, is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Resolution 62-13

Legal Immunity for Physicians of Florida Who Render Medical Aid as Good Samaritans Lake County Medical Society

WHEREAS the physician is expected to stop at a scene of accident, and

WHEREAS such physician in Florida may now be held liable for breach of contract if he leaves a scene of accident, having rendered medical aid as a good Samaritan; be it

RESOLVED, That the Florida Medical Association recommend passage of a statute granting legal immunity to any licensed doctor of medicine who renders aid at the scene of accident and proceeds about his affairs, and finally, be it

RESOLVED, That all physicians willingly render such aid if need arises.

"Resolution 62-14, Social Security, is approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

Resolution 62-14

Social Security Coverage for Physicians Lake County Medical Society

WHEREAS the Organized Physicians of Florida have in the past expressed their desire not to participate in Social Security Plans in any form, and

WHEREAS there is increasing pressure from socialistic-minded groups to extend Social Security Coverage to Physicians, and

WHEREAS it is the Physician's responsibility to demonstrate a firm stand against the inroads of Socialism; be it

RESOLVED, That the Florida Medical Association reaffirm its stand against Social Security Coverage, voluntary or compulsory, for Doctors of Medicine.

"It is our recommendation that Resolution 62-17, Indigent Medical Care be amended as follows: The word 'national' which is the first word at the top of page 61 be deleted and replaced by the words 'nationwide by individual states.'

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections, motion carried.

Resolution 62-17

Private Insurance, A Plan for Private and Indigent Medical Care Duval County Medical Society

WHEREAS due to recent advances of science and industry and changing economic concepts, good medical care is sometimes costly, and

WHEREAS it is a time-honored principle that our people meet mounting problems by insuring against them, and

WHEREAS "basic-need" standardization of all insurance policies, rather than socialization of medical care to meet basic needs is desirable; therefore, be it

RESOLVED, That the Duval County Medical Society in regular meeting on April 3, 1962, recommend that a nationwide, by individual states basic insurance policy covering basic needs with reasonable premiums be made available to the public through already existing insurance (Blue Cross-Blue Shield and Commercial), and be it further

RESOLVED, That this policy be made available to all American citizens and consideration be made for subsidization according to individual need, and be it further

RESOLVED, That a copy of this resolution be sent to the Florida Medical Association, and the Delegates from the Duval County Medical Society be instructed to support this measure in its entirety in attempting to carry it to the American Medical Association for action.

"The Reference Committee recommends that resolution 62-19, Fee Schedules be disapproved.

"Mr. Speaker, I move the adoption of this portion of the report."

Dr. Christian Keedy of Dade spoke at length against disapproval of this resolution and presented an amendment to it.

After a considerable amount of discussion, Dr. Stewart stated: "The Reference Committee moved that Resolution 62-19 be disapproved. In addition to that, Dr. Keedy has made an amendment, which is a little bit out of order, but you must keep in mind if the motion to accept the recommendation of this Committee is passed, then of course there will be no amendment to the resolution; if it is denied, then Dr. Keedy can make his motion to add the three words."

Voice vote was inconclusive, and a division of the House called for.

By standing vote, the House of Delegates sustained the recommendation of the Reference Committee.

"Resolution 62-21, Blue Shield, is approved as presented.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Resolution 62-21

Blue Shield

Orange County Medical Society

WHEREAS, The Orange County Medical Society believes that Blue Shield of Florida has the ability to provide the best type of prepaid medical care protection for the citizens of Florida, and

WHEREAS, It is essential that doctors retain control of the practice of medicine, and not lose it to the government, or any other nonmedical party; therefore, be it

RESOLVED, That the Orange County Medical Society recommend to the Florida Medical Association that Blue Shield of Florida be maintained and strengthened in every way possible; and that individual doctors and county medical societies give this Plan their wholehearted cooperation and support; and it is further

RESOLVED, That this resolution be submitted to the House of Delegates of the Florida Medical Association meeting for approval in session at Miami Beach, May 1962.

"Resolution 62-26—Legislation, is approved as presented.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Resolution 62-26

Legislation

Escambia County Medical Society

WHEREAS, the tenor of legislative and executive action has gained increasing momentum of a socialistic nature, and

WHEREAS, we deplore the loss of individual, corporate, county, city, and state initiative and responsibility due to the Federal Government's ever increasing power to control,

THEREFORE, BE IT RESOLVED, That the Escambia County Medical Society does request of our congressmen and senators from the State of Florida that they, in determining their vote on each issue, continue to give most careful consideration as to whether such legislation extends the regulatory power of the Federal Government and necessitates an extension of taxation powers by the Federal Government to support and implement such proposed legislation, and

BE IT FURTHER RESOLVED, That this Society does herewith record itself as actively supporting the Kerr-Mills Law with any appropriate amendments that may facilitate its implementation and vigorously opposes any King-Anderson type legislation.

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to our congressmen and senators.

BE IT FURTHER RESOLVED, That a copy of this resolution be presented to the House of Delegates of the Florida Medical Association for its appropriate action.

"We recommend that Resolution 61-4, Medical Care Commission, which was postponed for one year at the last meeting of the House of Delegates, be approved in principle since this is already largely in operation by the American Medical Association.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

Resolution 61-4

Medical Care Commission

Duval County Medical Society

WHEREAS, The problems of medical care for the American Public are many, and

WHEREAS, We are deeply appreciative of the past efforts and of the present studies the American Medical Association is making to solve some of these problems, and

WHEREAS, The true problems and needs of medical care have never been adequately defined and hence cannot be answered at this time, and

WHEREAS, The federal government will soon pass legislation attempting to answer some of these ill-defined problems, be it therefore

RESOLVED, That the Florida Medical Association instruct its delegates to the next annual meeting of the American Medical Association to strongly urge the immediate formation of a multilateral commission to study the problems of medical care in America today and in the foreseeable future; be it further

RESOLVED, That this commission be composed of sociologists, economists, medical educators, labor leaders and representatives of industry, all outstanding nationally in their chosen field; be it further

RESOLVED, That this commission be allowed to acquire all necessary help to achieve its mission; be it further

RESOLVED, That funds to accomplish the commission's objectives be made available by the American Medical Association; be it further

RESOLVED, That when the problems of medical care are defined, workable solutions to these problems entailing the least possible change in our present socio-economic structure be presented to the American Medical Association by this commission; and be it further

RESOLVED, That this resolution be immediately implemented.

"We recommend that Resolution 62-27, Blue Shield Multiple Service Contracts with ceilings up to $7,500 be disapproved.

"Mr. Speaker, I move the adoption of this portion of the report."

Dr. James D. Beeson of Duval, representing Anesthesiology on the Council on Specialty Medicine stated that he had been instructed by the anesthesiologists to add their disapproval of the resolution.

By voice vote, the motion of the Reference Committee chairman carried.

"We recommend that Resolution 62-28, the Annual Report of Blue Shield of Florida, Inc. for the year ending December 31, 1961 be accepted as information.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections, motion carried.

"Mr. Speaker, I move the adoption of this entire report as amended."

No discussion; no objections, motion carried.

Dr. Robert E. Zellner, President-Elect was given the privilege of the floor.

Dr. Zellner: "I would like to present a resolution that the House of Delegates authorize the Board of Governors to change the meeting place for the next Annual Meeting. The reason for this is that Annual Meeting sites have to be selected several years in advance, and a meeting place has been selected but difficulties have arisen which may be insoluble. We would like to have authorization, which must be given by this House, to make such a change if the change becomes necessary."

Dr. Stewart advised the delegates that vote must be unanimous to permit Dr. Zellner to present this resolution.

No discussion; no objections, motion carried unanimously.

Dr. Stewart: "The resolution is that the House of Delegates give the Board of Governors authority to change the meeting place if necessary."

No discussion: no objections, motion carried.

The Speaker called for the report of the Committee on Golf; however, the Chairman of this Committee, Dr. Julian A. Rickles, was not present to present this report. The winners of the golf trophies will be published as a News Item in this issue of The Journal.

The Speaker announced that Drs. James T. Cook Jr., Madison R. Pope, James F. Cooney and Robert F. Dickey had been appointed as tellers for the election.

Nominations for President-Elect were called for by the Speaker.

Dr. Jere W. Annis of Polk nominated Dr. Warren W. Quillian of Dade.

"Mr. Speaker - Gentlemen: Many of you will think that I stood up at the wrong time, since this is not the time to nominate the Secretary. Let me assure you that I did not—and that I am here with Sam's permission, to nominate another friend, not as Secretary, but as President-Elect of this Association.

Most of you know Warren Quillian, Pediatrician, of Miami. Most of you know that this Georgian who has practiced here in Coral Gables since 1926, has been active in organized Medicine, both in his county and state societies, for most of these 36 years. Most of you know that he has been a member of countless committees of our state association, as well as a member of its Board of Governors, and that he has always acquitted himself with dispatch, with effectiveness, with maturity and with dignity in these assignments.

Most of you are aware that in school he was a Phi Beta Kappa and an AOA; that among his many honors and duties, he has been the Director of Pediatrics and Chief of Staff at Jackson Memorial Hospital; that he is Professor of Clinical Pediatrics in the University of Miami School of Medicine, as well as a member of the Board of Trustees of that university; that he served as a Commander in the Medical Corps of the United States Navy from 1942 to 1945; that he achieved national recognition as President of the American Academy of Pediatrics 10 years ago; and that he was a founding member of the Florida Pediatric Society.

Most of you know that he is—and has been throughout his professional life—an outstanding Physician, in the broadest sense of the term, and that he has served organized Medicine tirelessly, efficiently and unselfishly for many, many years.

And since you do know all this, there is really nothing for me to say except that, in addition to it, Warren is a wonderful guy—a fine friend—and will bring to the presidency of the Florida Medical Association the stature, the dignity and the perceptive leadership that the office demands at this time.

It is a real honor and privilege to place in nomination for the Presidency-Elect of the Flor-

ida Medical Association the name of Warren W. Quillian, of Miami."

The nomination was seconded by Drs. Walter C. Jones of Dade, W. Dean Steward of Orange, W. Dotson Wells of Broward, Erasmus B. Hardee of Indian River, Walter C. Payne Sr. of Escambia, and Hugh A. Carithers of Duval, who moved the nominations be closed.

As there were no other nominations, the Speaker asked for a vote that nominations be closed and the Secretary cast a unanimous ballot for Dr. Quillian.

Motion carried by voice vote.

The Speaker asked Dr. Jack Q. Cleveland and Dr. Edward Jelks to escort Dr. Quillian to the platform.

Dr. Quillian: "Mr. Speaker, Mr. President, Delegates, Members and Guests: I am very grateful to all of you for this expression of confidence in me, and for the gracious remarks which have been made.

"Medicine is beset by many problems now—socioeconomic, political, and scientific in scope, and we all will have to work together in order to solve them. In our efforts to find the answers to some of these problems we, and I speak for myself and the incoming President, will depend on your help and cooperation. I pledge you my best efforts to fulfill the duties that confront me as your President-Elect."

The Speaker asked for nominations for the office of Vice President.

Dr. Charles K. Donegan of Pinellas nominated Dr. Edward L. Cole Jr. of Pinellas.

Nomination was seconded by Dr. Harry W. Reinstine Jr. of Duval and Dr. George S. Palmer of Leon.

Dr. Ralph Herz moved that the nominations be closed.

As there were no other nominations, the Speaker asked for a vote that nominations be closed and the Secretary cast a unanimous ballot for Dr. Cole.

The Speaker asked for nominations for Speaker of the House.

Dr. James T. Cook Jr. of Jackson-Calhoun nominated the Vice Speaker, Dr. Eugene G. Peek Jr. of Ocala.

Dr. W. Dean Steward of Orange nominated Dr. Joseph S. Stewart.

Dr. Stewart: "I appreciate this nomination terrifically, but I must decline. I am 100 per cent in favor of my wonderful Vice Speaker, who has sat by my side for two years, and if you will be good enough to let me withdraw my name, I will appreciate it."

Dr. Samuel G. Hibbs of Hillsborough seconded the nomination of Dr. Peek, moved the nominations be closed and the Secretary instructed to cast a unanimous ballot for Dr. Peek.

The Speaker asked for nominations for Vice Speaker of the House.

Dr. Walter E. Murphree of Alachua nominated Dr. Franklin J. Evans of Dade.

Nomination seconded by Dr. Jack Cleveland of Dade and Dr. Clyde O. Anderson of Pinellas, who moved the nominations be closed. Motion seconded by Dr. Hampton.

As there were no other nominations, the Speaker asked for a vote that nominations be closed and the Secretary cast a unanimous ballot for Dr. Evans.

Motion carried by voice vote.

The Speaker asked for nominations for Secretary-Treasurer.

Dr. Edward R. Ennis of Dade: "I think that it is good that some precedents are continually established; so I should like to place in nomination the name of Dr. Samuel M. Day and request the secretary to please note that he was nominated by Dr. Annis."

Dr. Herz moved that the nominations be closed and a unanimous ballot cast for Dr. Day.

No discussion; no objections, motion carried.

The Speaker asked for nominations for Delegate to the American Medical Association to succeed Dr. Reuben B. Chrisman Jr., whose term expires on December 31, 1962.

Dr. Homer L. Pearson Jr. of Dade nominated Dr. Chrisman to succeed himself for a two year term beginning January 1, 1963.

Nomination seconded by Drs. Walter J. Glenn Jr. of Broward and Alpheus T. Kennedy of Escambia.

Dr. Hardee moved that the nominations be closed and the Secretary instructed to cast a unanimous ballot for Dr. Chrisman.

Motion carried.

For Alternate Delegate to the American Medical Association to succeed Dr. Frank D. Gray, whose term expires December 31, 1962, Dr. John D. Milton of Dade nominated Dr. Gray for a two year term beginning January 1, 1963.

The Speaker entertained a motion to close the nominations and cast a unanimous ballot for Dr. Gray.

Motion carried.

Dr. George S. Palmer of Leon nominated Dr. Francis T. Holland to succeed himself as Delegate to the American Medical Association for the two year term beginning January 1, 1963.

Nomination seconded by Drs. Ralph Herz of Monroe, Erasmus B. Hardee of Indian River and Edward W. Cullipher, of Dade.

The Speaker entertained a motion to close the nominations and cast a unanimous ballot for Dr. Holland.

Motion carried.

Dr. Eugene B. Maxwell of Hillsborough nominated Dr. Madison R. Pope to succeed himself as Alternate Delegate to the American Medical Association for the two year term beginning January 1, 1963. Dr. Maxwell moved the nominations be closed.

There were no other nominations; the Speaker ruled Dr. Maxwell's motion in order and instructed the Secretary to cast a unanimous ballot for Dr. Pope.

The Speaker advised the Delegates that the Florida Medical Association is now entitled to a fifth Delegate to the American Medical Association and a fifth Alternate Delegate. He asked for a motion on whether the Delegates would serve for the remainder of 1962, or the remainder of 1962 plus the two succeeding years.

Motion was made to elect the delegates to serve for the remainder of 1962 plus the two succeeding years, term expiring December 31, 1964.

No discussion; no objection, motion carried.

The Speaker called for nominations for Delegate to the American Medical Association for the term ending December 31, 1964.

Dr. Thomas M. Irwin of Duval nominated Dr. Leo M. Wachtel, of Duval.

Dr. Marion W. Hester of Polk nominated Dr. Jere W. Annis of Polk.

Dr. Samuel G. Hibbs of Hillsborough and Dr. Donald F. Marion of Dade seconded the nomination of Dr. Annis.

Dr. Alpheus T. Kennedy of Escambia and Dr. Rowland E. Wood of Pinellas seconded the nomination of Dr. Wachtel.

Dr. Herz moved the nominations be closed.

No discussion; no objections, motion carried.

Dr. Samuel G. Hibbs of Hillsborough moved that the man who is runner-up in the election of Delegate automatically be elected Alternate Delegate.

With the concurrence of the candidates and no objections, motion carried.

By secret ballot, Dr. Annis was elected, receiving 86 votes to Dr. Wachtel's 72.

The Speaker announced that Dr. Annis would serve as Delegate to the American Medical Association, and Dr. Wachtel would serve as Alternate Delegate.

The Speaker read the nominations for membership on the Committee on Membership and Discipline as presented by the Board of Governors. He asked for nominations from the floor for this Committee.

Motion was made to approve the recommendations of the Board of Governors.

There was no discussion; no objections, and motion was carried to approve the nominations of the Board of Governors, which are as follows: District 1, Drs. William C. Roberts and Sidney G. Kennedy Jr.; District 2, Dr. Ashbel C. Williams; District 3, Drs. Edward J. Lauth Jr. and John R. Hilsenbeck; District 5, Drs. W. Wardlaw Jones and John J. Cheleden; District 6, Dr. William H. Proctor; District 7, Dr. John M. Butcher; District 9, Dr. James T. Cook Jr.; District 10, Dr. Ernest R. Bourkard; District 11, Dr. Frank C. Bone; District 12, Dr. Edward L. Cole Jr.

On motion by Dr. Walter E. Murphree of Alachua, the members of the House of Delegates gave a standing ovation to the retiring Speaker, Dr. Joseph S. Stewart.

The Speaker accepted, without motion, the suggestion of Dr. James L. Anderson of Dade that the management and personnel of the Americana Hotel be thanked for the fine service rendered the Florida Medical Association during the Annual Meeting.

The Speaker asked Dr. Burns A. Dobbins Jr. and Dr. Meredith Mallory to escort the incoming President, Dr. Robert E. Zellner, to the rostrum.

Dr. Harvard: "I am glad that it has been my privilege to work with you. It is with pleasure that I present to you your own personal gavel; I hope you will wield it lightly and firmly. May God bless you."

Dr. Zellner presented the Past President's pin to Dr. Harvard and placed it in his lapel.

Dr. Zellner: "I wish I were capable of making a speech. One of my most rewarding experiences has been association with this fine man throughout the past year. Not only has he rendered outstanding service to his profession, but he has been an honor to the office he has held."

Dr. Homer L. Pearson Jr. and Dr. Gordon H. McSwain escorted Mrs. Harvard to the rostrum, and Dr. Zellner presented her with the large picture of Dr. Harvard which had hung in the Board Room of the headquarters building during Dr. Harvard's term of office.

Dr. Zellner: "Jimmy, I think we may be giving this to you a year too late, because I think in the past year you would have liked to know what your husband looked like. It has been a pleasure to have such a gracious first lady."

Dr. Zellner introduced Mrs. Zellner, their daughter Jean, who teaches in Atlanta, Cindy, who attends Emory University, and their son Robert, who enters premedical training at Emory in the fall of 1962.

Dr. Zellner: "The hour is late, but there are one or two things I would like to say before I return you to our distinguished new Speaker. You have already been apprised of the fact, if you did not already know it, that there are momentous problems ahead, and certainly they seem even more momentous to me because of my increased responsibility. There are three areas in which we do have real problems; certainly, on a national level, and as you know, one of the cardinal principles of answering an argument which you cannot otherwise answer is to discredit the opponent, either by impugning his motives or his intelligence or in any way you can make him look cheap and self-interested. These tactics are being used on us right now, and you can do something about it.

"You have heard much about the Board of Governors this morning, and I think you ought to know more about its members. Will Rogers once said he never knew a man he did not like, and I think I can say the same thing, but the crux of this little aphorism is the word "know." People that you know, you are not likely to distrust; so I want you to see your Board of Govnors. You elected the majority of this Board; the others were appointed by your President and your Immediate Past President. First is your President-Elect, Dr. Warren W. Quillian; your new Vice President, Dr. Edward L. Cole Jr.; your Past President, Dr. S. Carnes Harvard and Past President once removed, Dr. Leo M. Wachtel; your Speaker of the House, Dr. Eugene G. Peek Jr.; from District A, Dr. Henry J. Babers Jr.; from District B, Dr. H. Phillip Hampton; from District C, Dr. Charles J. Collins; from District D, Dr. Ralph Sappenfield, from the state at large, Dr. Charles Larsen Jr., and your Secretary-Treasurer, Dr. Samuel M. Day. None of us makes any claim to omniscience. We will make our mistakes, but I do hope that whenever something appears that is difficult to understand, you will contact these men or the Association's Executive Office and give them the benefit of the doubt. You are the governing body of this organization, and your directives are mandatory on this Board. The only mission that it has in the interim between annual meetings is to pursue a course which it thinks is within the will of the House of Delegates.

"I told you a year ago that I would do my best to fill this office with dignity and in a manner which would be a credit to the medical profession, and which would meet with your approval. This pledge I affirm again today, and I ask your help."

Dr. Zellner announced that there would be a meeting of the new Board of Governors immediately following adjournment of the House of Delegates.

At the suggestion of Dr. Hardee, the House of Delegates gave the Board of Governors a standing vote of confidence.

The Speaker asked Dr. Homer L. Pearson Jr. to give the benediction.

Dr. Pearson: "We thank Thee, our Father, for another Sabbath Day in which we can worship Thee; we thank Thee for the fellowship the days of this convention have afforded; we thank Thee for the strength of those among us who are striving to protect the liberty and independence of our nation; we thank Thee for the privilege of working for Thee. Make us more effective witnesses for Thee. We ask Thee now for Thy guidance, for Thy protection and for Thy mercy. Give us patience, tolerance and mercy to those whom we serve. Now may the love of God go with you and abide with you forever. Amen."

Dr. Peek: "I now proclaim the Eighty-Eighth Annual Meeting of the Florida Medical Association adjourned."

Meeting adjourned at 1:15 p.m.

President's Page

Opportunities for Service

Do you ever wonder "Why the Florida Medical Association?" Well, after you eliminate the parliamentary and legal verbiage in our Charter, it all boils down to the fact that the Florida Medical Association has one excuse for being. It is a *service* organization whose avowed purpose is to render *service* to the public and to the medical profession in Florida. Its success or its failure is measured solely on how well it fulfills this purpose.

It may sound naive or distastefully sentimental to say so, but I have a feeling, which I am confident is shared by most doctors, a very deep feeling of appreciation and of obligation to the medical profession for what it has done for me. The practice of medicine is not only a means of making a living, it is a philosophy, a way of life, and an introduction to the finest people on earth, the medical fraternity. It has been my privilege for the past 10 years to serve continuously in one capacity or another on some committees of this Association. These jobs I like to think of as "opportunities for service" rather than just committee assignments.

In the past several months, I have written in the neighborhood of a hundred letters asking doctors to serve on various committees. I have met with only one unqualified refusal. Just what does one get out of organizational work in the interest of medicine? Well, several things: Time away from home and family, lost time from practice, out-of-pocket expense money, and possibly a sense of satisfaction that one is doing something worth while. Too often a collateral of organizational activity is being labeled "medical politician," a term which, when applied, is not generally meant to be complimentary. My own experience has been that any activity in the service of medicine to which any honor was attached carried so much more work and responsibility that the honor was relatively inconsequential. So why do these hundred or more men and women accept these jobs? There could be a hundred different answers to this question, but basically I believe it is simply because of an innate feeling of obligation to their profession.

So, at the outset of this year, I would like to express my appreciation to those hundred or more "medical politicians" who have accepted committee appointments and other positions of responsibility. I hope that the knowledge that their service has been in keeping with the best of tradition of a noblest of professions will be adequate compensation for whatever personal sacrifice they may be asked to make.

Robert E. Gellner



Editorials

Were You There?

Were you there at the Eighty-Eighth Annual Meeting of the Florida Medical Association? If you were, one might ask where were you? Were you in a room or suite enjoying good fellowship with old friends? Were you at the scientific assemblies adding to your knowledge of the latest advances in the practice of medicine? Were you visiting the technical exhibits acquainting yourself with new drugs and encouraging exhibitors who contribute so much to the meetings, or the scientific exhibits where new methods and modalities were illustrated? Were you at the reference committee meetings to listen or express yourself on some of the problems facing organized medicine today, or were you at the meetings of the House of Delegates in an official capacity or as a spectator to hear the business of the Association transacted? If you were not at all of these places at some time during the meeting, you probably did not realize as much benefit from it as you should have. Which of these functions is most important will depend upon the viewpoint of the individual, but, as with good tobacco, a mixture of all of them makes the best blend.

When one is asked to give his impressions of a meeting, he endeavors to "cover the water front" as much as possible. This observer did that and succeeded with the exception of that indispensable arm of the Association, the Woman's Auxiliary, but that deserves an editorial all of its own. As a result, these are some of my observations. Four full days of meeting with the third one devoted exclusively to the speciality societies could easily seem too long in a less desirable meeting place than the Americana. It appeared unwise to detract from the scientific assemblies with the reference committees meeting concurrently. It was also unfortunate for the Blue Shield meeting to encroach upon the time of the first scientific assembly. I thought these assemblies were excellent, but the poor attendances did not begin to compensate the Committee and essayists for the tremendous amount of work and planning involved in the preparation of such an outstanding program. In my opinion, this is the most important function of the Association and deserves much better support from the membership than it is receiving. I thought all papers were well prepared and presented, but I regarded as the high lights of the program the panel of dermatologists with their beautiful slides and precision presentation, the challenging diagnostic clinics with their astute panels, and the fascinating basic science presentations by guest speakers at the third assembly. One who does not keep abreast in these latter areas will soon be out of step in the practice of medicine. The Association owes a great debt to Dr. Thad Moseley, and I know I voice his wish that next year every registrant at the meeting attend at least part of these assemblies. Nothing is more frustrating and discourteous to a well prepared speaker than a poor audience.

On visiting the technical exhibits, I found a feeling of dissatisfaction with the lack of interest and poor attendance. These exhibitors are the life blood of our meetings, and our revenue from this source is declining because of budgetary cuts and our disinterested attitude. Again, I make a plea for a renewed interest at the next annual meeting. I am sure your service to your patients will be improved by these visits and the drug industry will be encouraged to remain an important ancillary member of our team.

What were some of my personal impressions of other high lights of the meeting? There was the warm glow I received from seeing some of the grand senior members of our Association, such as Dr. Walter Payne, Dr. W. C. Thomas, Dr. Ed Jelks and others, and the sadness that some, as Dr. Herbert Bryans, would no longer meet with us. I just wondered if all of us had imitated their lives if Medicine would have all

of its problems today. Then there was the pleasure of seeing two other senior members fittingly rewarded—Dr. William Rowlett with the Certificate of Merit and Dr. W. D. Sugg with the A. H. Robins Award; the heart-warming address so typical of our president, Dr. Carnes Harvard; the dynamic, inspirational addresses of the guest speaker, Congressman Dr. Durward Hall, and our own Dr. Ed Annis; the adroitness and dignity of the Speaker of the House, Dr. Joe Stewart; the efficiency of the reference committees with the earthy humor of one of its chairman, alopecic, damn-near totalis, Dr. Ed Cullipher; the pleasure of seeing the induction of the incoming President, Orange County's own Dr. Bob Zellner, with all of his vigor and supercharged energy, and the election of an old friend, Dr. Warren Quillian, as President-Elect. I was deeply impressed, too, by the adeptness and efficiency with which Harold Parham and his staff manage the business affairs of the Association and the earnestness and sincerity of the Board of Governors in its deliberations.

All in all, it was a great show, well worth the admission price. I came away with the reassuring feeling that all is well with the Association and its affairs are in very capable, dedicated hands. Being also a senior member, or perhaps I should use the term life member because of the social security implication, I admit that all of this feeling contained a large portion of sentimentalism which could easily color the objectiveness of this image.

Charles J. Collins, M.D.
Orlando

The Annual Meeting

Why Continue the Scientific Assemblies?

The Eighty-Eighth Annual Meeting of the Florida Medical Association, continuing the evolving pattern of recent previous sessions, was characterized by an efficient smoothness of procedure and casual atmosphere which indicated carefully studied preparation and constant supervision by the Association's staff and the Scientific Council. From the streamlined registration to the orderly conduct of the scientific programs there was the smoothness which comes only from hard work. One suspects that this hard work is wasteful of dedicated talent, poorly appreciated, and largely unrecognized by the membership for whom it is provided.

It is obvious to any observer that the Annual Meeting has a threefold purpose: the BUSINESS of the Association; RECREATION, both diurnal and nocturnal, and MEDICAL with the last running a mighty poor third.

The initiate-neophyte is always surprised at the amount of work done by the delegates and at the length of time consumed by this work both in the reference committees and in the sessions of the House of Delegates. The obvious necessity for this expenditure of effort precludes the need for further comment except to note that the membership should be grateful for the diligence of its delegates.

Similarly, one expects considerable attention to recreation at the Annual Meeting, particularly in the setting of Miami Beach, since it is much needed time away from practice, but it seems unfortunate that rest and relaxation (?) provide the main reason for the registration of so many. This conclusion is inevitable when one is faced with the fact of the registration of over 1,100 physicians for this meeting while at the opening of the scientific assembly presenting the guest speakers there was an audience of two dozen or less, and none of the speakers saw more than 150 listeners at any of the scientific assemblies. Nor is this desultory showing any indication of the quality or variety of the program. Every physician could find much of interest in the varied subject matter and most could maintain real interest in all of it. Innovations included a carefully rehearsed, fast-moving presentation of dermatologic diseases which was beautifully illustrated with color slides. Also new were the diagnostic clinics which provided the "experts" with a base for flights of imagination as well as sound deduction and which also encouraged audience participation. The member speakers gave as polished and well prepared papers as did the guests with subjects ranging from the exotic Germ-Free Life to the perhaps more mundane Cat Scratch Disease.

No, the turnout was not dictated by either subject matter or manner of presentation. Those who did come were amply rewarded. In mild defense of the audience, or lack thereof, one must note the conflict of the reference committee meetings with the second scientific assembly, which was probably unavoidable. One may hopefully assume that many more than 15 or 20 per cent of the physicians who were registered sat in on at least a part of the sessions; certainly there was considerable audience turnover. And one must be aware that the scientific exhibits, excellently prepared and arranged, provided food for thought for many who chose not to sit and listen in the theater. (To digress momentarily, one hopes that those responsible for the commercial exhibits will not continue to ignore the weight of evidence and the resolutions of our specialty societies regarding the hazards of cigarette smoking by continuing to provide space for give-away or other advertising by cigarette companies.)

Two unnecessary and correctible distractions for the audience, and speakers as well, should be noted. One was the use of stationary microphones which "lost" the voice of the speaker who turned to discuss his slides. The lapel or collar type of microphone is commonly in use, obviates this distracting fading of the speaker's voice, and should be made available for meetings with the *potential* audience of the Association.

The other distraction was the dismal demonstration of the joys of regimentation wherein "Union Rules" dictated the concurrent presence of two projectionists because one 2 by 2 projector and one 3¼ by 4 projector were used. These individuals operated projectors mismatched to a wonderfully large screen, seemed unable to focus many of the slides, and compounded the ridiculous by talking to each other to the point of missing their cues to change slides. Fortunately, or unfortunately, these distractions were noted by very few except the speakers—there were relatively few others present.

In rather marked contrast, the General Session featuring Durward G. Hall, M.D., Congressman from Missouri, attracted nearly a full house. Perhaps part of this turnout may be explained as courteous treatment of President Harvard's guest. But is similar courtesy less indicated for other guest speakers, or even for our own member speakers? One is faced with the thought that our physicians demonstrate more concern with socioeconomic factors (and with the recreational break) than with scientific education at our Annual Meeting.

Perhaps this is reasonable, proper and as it should be. If so, why not recognize and admit the fact? Why charge the Scientific Council and the staff with the burden of providing such an excellent program for so very few? Why invite guest speakers only rudely to provide an audience of two or three dozen? Perhaps we should relegate scientific presentations entirely to the specialty section meetings, but at least three of these meetings this year were equally poorly attended by their own members.

Are we forgetting our primary purpose as physicians? If we recognize a need for scientific pursuits at our Annual Meeting, let us demonstrate the fact by our appearance. Otherwise, why continue the scientific assemblies?

Nelson H. Kraeft, M.D.
Tallahassee



Clinical Comment

Cardiology and Endocrinology Symposium

A most interesting symposium on Cardiology and Endocrinology was a feature of the combined Central Florida Medical Meeting and Cardiovascular Seminar held recently at the Cherry Plaza Hotel in Orlando.

Dr. Charles A. Hufnagel, Professor of Surgery at Georgetown University School of Medicine, spoke on "Aortic Valve Lesions." He stated that one must understand the natural history of the disease process involving the aortic valve, since once symptoms have begun, the clinical course is very short. A corrective technique has been developed in which the operation is carried out through an aortotomy with the patient on total cardiopulmonary by-pass with local hypothermia of the heart. This is performed by bathing the external and internal surfaces of the heart with a saline slush, temperature of 8 to 10 degrees centigrade. Total body perfusion is carried out at 30 degrees centigrade. At these temperatures arrest of the heart up to two hours is tolerated satisfactorily. If severely damaged, the aortic valve cusps are excised and the individual cusps are replaced with a prosthesis composed of dacron

cloth impregnated with silicone rubber. The total leaf thickness is 2/1000 of an inch. All three cusps have been replaced in a number of patients. The chief lesion being corrected at the present time is severe calcific aortic stenosis, and with present technique there is an 8 per cent mortality. Early surgery before decompensation appears is urged. In aortic insufficiency in clinically terminal patients the mortality is high, being 20 per cent in the severely ill to 10 per cent or less in good risk patients. Postoperatively there has been a reduction in heart size and good to excellent results in the majority of patients.

Aortic insufficiency may have an acute onset from traumatic lesions, syphilis, acute endocarditis, and ruptured aneurysms of the sinus of Valsalva. Chronic aortic insufficiency is produced by rheumatic fever, congenital lesions with bicuspid valves and coarctation, Marfan's syndrome, subacute bacterial endocarditis, and dissecting aneurysms of the aorta. The operative treatment including replacement of the cusps in aortic insufficiency is essentially that described under aortic stenosis.

Dr. Helen B. Taussig, Professor of Pediatrics at Johns Hopkins University School of Medicine, stated that whereas atrial septal defects and most of the abnormal congenital cardiac defects have the tendency to grow larger as the child grows in age, ventricular septal defects on the other hand tend to grow smaller as the child grows in age and the cardiac muscles of the ventricles increase in size. She stated that in the tetralogy of Fallot the shunting type operation of either the Blalock or the Potts procedure is still the operation of choice in infants and very young children until the child is old enough to make a total correction through the open heart technique, the procedure of choice.

Dr. J. Willis Hurst, Professor and Chairman of the Department of Medicine at Emory University School of Medicine, speaking on the subtle signs of heart disease, stated that insomnia in the cardiac patient should suggest unrecognized early cardiac failure. The patient with atypical mitral stenosis snould make one think of atrial myxoma, probably a condition as common as pheochromocytoma. A patient with the picture of shock but with hypertension and pain in the chest, back and abdominal area, should suggest a dissecting aneurysm of the aorta. A hypertensive patient with weakness should bring hyperaldosteronism to mind. In obese patients it is often wise to check blood pressure in forearms because of faulty high readings obtained in upper arm readings.

He stressed the value of using the carotid sinus reflex to differentiate various arrhythmias, but stressed that care should be used in doing this to an elderly patient so as not to compromise the cerebral circulation. He also stated it is wise to listen over every scar as a check on traumatic arterial venous fistulae, especially in patients with obscure heart failure.

Dr. Lamar Earle Crevasse, Associate Professor of Medicine at the University of Florida College of Medicine, presented his intracardiac catheter phonocardiographic findings for the etiology of the third and fourth heart sounds. He thought that his studies proved a third heart sound was due to rapid ventricular filling and vibrations of the ventricular wall rather than sounds initiated from heart valves themselves. Confirmatory evidence was done with simultaneous intracardiac catheter studies on pressure in the atria and ventricles. In the study of the action of digitalis on the heart muscle, he utilized electron microscopy to evaluate the different microscopic structures of the heart muscle. Studies were made in both human and animal muscle tissue baths involving the glucose cycle. He thought that digitalis enhances the high energy phosphate bonds in the heart muscle, thus giving more effective cardiac contractions.

Dr. Menard M. Gertler, Director of Research and Cardiology of the Institute of Physical Medicine and Rehabilitation of New York University College of Medicine, speaking on the preselection of coronary-prone individuals, stated that a method of singling them out is based on a set of variables which are known to be associated with the disease. When such variables as heredity, history, body build, weight, height, serum lipids and others are assembled in a linear regression equation and set into a computer which gives each variable a proper weight and correction with respect to the other variables; a score is obtained by which those most prone and those least prone to coronary artery disease will be classified. This technique offers a most powerful research tool and is of practical value particularly in the hands of those experienced with this type of investigation. The technique has proved to be over 97 per cent accurate in forecasting a group of the most prone individuals and 99 per cent accurate in forecasting least prone individuals, with no error in the group not classified most prone or least prone to have coronary artery disease.

Dr. John B. Stanbury, Associate Professor of Medicine at Harvard Medical School, presented a paper which advanced the thesis that thyroid

disease runs in families. This is not always the same type as both hyperthyroidism and hypothyroidism may exist in the same families. He thought case histories on patients with thyroid disease will usually reveal evidence of other thyroid disease in the family tree. He expressed the belief that there is a definite inheritance factor, particularly in Hashimoto's disease. The case of a 19 year old girl with hyperthyroidism and thyroid storm whose mother had full-blown myxedema was used as an illustration. He was of the opinion that most inborn errors of metabolism are thought to be a combination of constitutional defects and environmental factors.

Dr. Oliver Cope, Associate Professor of Medicine at Harvard Medical School, stated that some 40 to 50 per cent of all known nodular goiters may well get by without definitive surgery. Dr. Cope diagrammatically showed the development of nodular goiters in the influence of thyrotrophic hormone released by the pituitary. He stressed that the entire process is reversible provided the stage of adenoma has not been reached. Up to that point he thought practically all goiters could be converted to essentially normal thyroid tissue by the use of desiccated thyroid given at the dosage of 180 to 200 mg. per day. His plan was to follow the patients with routine visits for periods ranging up to two to three years with careful palpation of the thyroid gland for evidence of suppression of these nodules. Any persistent or enlarging nodules then would be explored surgically. He discussed the possibility of this type of therapy masking a carcinoma of the thyroid gland. In some 300 cases under his supervision this has occurred only six times, but generally he thought that this would occur only in cases of papillary carcinoma of the thyroid, a type of malignancy which has the best cure rate.

Dr. Garfield G. Duncan, Professor of Medicine at the University of Pennsylvania School of Medicine, gave a most interesting discussion on the oral treatment of diabetes and also spoke on the principles and management of juvenile diabetes.

Dr. John R. Preedy, Associate Professor of Medicine at Emory University School of Medicine, spoke on the recent progress in diagnoses and treatment of adrenal disorders. He stated that investigative study of SV 4485 (Metopirone) shows that the addition of this drug results in the accumulation of compound S and a decrease in cortisone which results in a negative feedback effect on the pituitary with a rise in the production of ACTH. The use of this drug and urinary 17 keto-hydroxy-steroid determinations increase the accuracy in diagnosis of certain disorders such as hypopituitarism and Cushing's disease, and are also an aid in the differential diagnosis between adrenal cortical tumors and hyperplasia of the adrenal cortex.

James A. McLeod, M.D.
Orlando

Hillsborough County-Suncoast Fourth Annual Cardiovascular Seminar

On February 17-18, 1962 the Hillsborough County Heart Association and the Suncoast Heart Association held their fourth annual cardiovascular seminar at the Hawaiian Village in Tampa.

The following impressive faculty presented 12 papers during the two day seminar: Dr. Jesse E. Edwards, Professor of Pathology, Department of Pathology and Clinical Laboratories, University of Minnesota Medical School, Minneapolis; Dr. Donald B. Effler, Chief, Department of Thoracic Surgery, Cleveland Clinic, Cleveland; Dr. Alexander S. Nadas, Associate Clinical Professor of Pediatrics, Harvard Medical School, Boston; Dr. Tinsley R. Harrison, Professor of Medicine, Department of Medicine, The University of Alabama Medical Center, Medical College of Alabama, Birmingham; Dr. Bernard Lown, Assistant Professor of Medicine, Department of Nutrition, Harvard University, School of Public Health, Boston; and Dr. Irvine H. Page, Director of Research and member of Governing Board, Research Division, Cleveland Clinic, Cleveland.

Dr. Nadas discussed various arrhythmias in infants and children. Paroxysmal atrial tachycardia is a common arrhythmia in infancy occurring mostly in males below four months of age, the etiology usually being unknown and the prognosis good. If the tachycardia lasts 48 hours or longer, congestive heart failure develops in the majority of the patients, whereas in chronic atrial tachycardia there is a relative infrequency of congestive heart failure.

Heart block in childhood is usually related to surgical intervention, especially closure of ventricular septal defects. Patients with congenital heart block may have no other heart defect, although frequently harsh pulmonic systolic murmurs or diastolic rumbles are heard because of the

increased stroke volume. The condition is usually innocuous; however, the patients may have attacks of Stokes-Adams syndrome and should be treated with ephedrine, isoproterenol and/or chlorothiazide.

Dr. Harrison's first talk dealt with the importance of birthdays and heart disease. He presented the evidence for and against arteriosclerotic heart disease being the cause of congestive heart failure in the elderly patient and also discussed the evidence for the clinical diagnosis of senile heart disease or presbycardia. He re-emphasized that the term arteriosclerotic heart disease should be reserved for those situations only in which there is clinical or electrocardiographic evidence of coronary artery disease and actually thought that the Britisher's term ischemic heart disease was more meaningful.

He demonstrated his studies of chest motion, that is, changes over the precordium, that take place during the cardiac cycle. There are characteristic changes with aging, the same changes being present in congestive heart failure. The chest wall motions as seen in the aged and in patients with congestive heart failure are the same as those seen in the older premenopausal females; therefore, they are not thought to be due to coronary artery changes per se. Dr. Harrison admitted that his studies of chest wall motion were strictly of academic interest and thought that they needed to be correlated with some direct measures, such as cardiac catheterization studies.

Dr. Effler's talk on surgical treatment of acquired valvular heart disease was limited to treatment of mitral valve disease. The indications for open heart surgery on the mitral valve are becoming more numerous and include stenosis, calcific valves, any significant degree of mitral regurgitation and when the possibility of an atrial myxoma simulating mitral stenosis exists. Dr. Effler discussed his experiences with the Star-Edwards valve and showed movies demonstrating the efficiency of this prosthesis which completely replaces the mitral valve.

Dr. Edwards discussed chronic myocardial diseases which could manifest themselves by generalized enlargement of the heart and in which the electrocardiographic changes were nonspecific. Among these was chronic myocarditis of unknown etiology which pathologically reveals a loss of muscle fibers with secondary endocardial sclerosis. Secondly, he mentioned idiopathic myocardial failure in the adult where no structural changes are to be found pathologically. He compared this situation to myasthenia gravis, where the muscular weakness and failure might be due to a chemical or enzymatic abnormality. Systemic diseases which can affect the myocardium should always be considered when one is presented with a patient with otherwise unexplained cardiomegaly or congestive heart failure. Thyroid disease, either myxedema or thyrotoxicosis, hemochromatosis, amyloidosis and serotonosis were given as examples. Dr. Edwards pointed out that any of these diseases could be confused clinically with chronic constrictive pericarditis, which should always be kept in mind since this is a surgically curable form of heart disease.

Dr. Page served as moderator at the first luncheon panel discussion, and the panel members, Drs. Nadas, Effler, Edwards, Lown and Harrison, discussed "Unusual Causes of Myocardial Failure." The emphasis during this interesting session was again on recognizing the correctable causes of heart failure.

Dr. Lown, in his talk on ventricular fibrillation and tachycardia, digressed from a discussion of the usual and older methods of treatment to describe his recent experience with external countershock in converting ventricular fibrillation. This is a simple, absolute method which can even be used on an outpatient basis. Two hundred and fifty volts of direct current are used to give the external countershock, monitoring with an electrocardiograph so that the shock is given at the proper time in the cardiac cycle.

Dr. Page talked on civilized man's greatest killer—arteriosclerosis. He mentioned the multiple factors important in the pathogenesis, such as the anatomy, biochemistry and physiology of the vessel walls and the composition of plasma, lateral arterial pressure and rate of filtration. The significance of cholesterol in the pathogenesis of arteriosclerosis is reaffirmed by the Framingham report, and it is known that serum cholesterol can be decreased by increasing the amount of unsaturated fats and reducing the saturated fats in the diet. Feasibility studies are now going on in six centers evaluating different diets to see if the incidence of heart diseases can be decreased through dietary restrictions.

Dr. Lown started the second day of the seminar with an informative topic, "Atrial Arrhythmias —to dig or not to dig." Although digitalis is indicated as therapy in many atrial arrhythmias, it may be the cause of the atrial disorder in some cases. Fifty per cent of the cases of paroxysmal atrial tachycardia with block in Dr. Lown's ex-

perience are due to overdigitalization or to an exaggeration of digitalis effect by hypokalemia of any cause. Carotid sinus stimulation is a helpful maneuver to increase the degree of block and make the atrial tachycardia more apparent.

Dr. Page described hypertension as a disease of regulation and discussed the hemodynamics, renal mechanism and therapy. He gave his criteria for performing a renal arteriogram, and described the various pathological changes in the renal artery that lead to narrowing of the lumen. He thought the most important drugs in the medical management of hypertension were reserpine, chlorothiazide and guanethidine, and before one can say that hypertension is adequately controlled, the supine blood pressure must be normal.

Dr. Edwards discussed the role of the pulmonary vascular bed in adjustments of the circulation in congenital cardiac septal defects. The resistance to flow in the pulmonary artery is the important factor in determining the direction of flow through the shunts.

Dr. Nadas next talked on heart disease in the newborn. He discussed the significance of the presence of a heart murmur at various times during the first year of life. If the murmur was heard only at birth or at six months or 12 months, there was a small chance that the patient had congenital heart disease; however, if the murmur was heard at birth and each of the next two six month intervals, there was a 60 per cent chance that the child had congenital heart disease. Dr. Nadas also discussed the various cardiac lesions causing congestive heart failure in the newborn period.

Drs. Nadas, Effler, Page and Lown participated in the second luncheon panel discussion on "Digitalis" with Dr. Harrison as moderator. The problem of knowing when a person was fully digitalized and deciding on a maintenance dose was thought to be a common one.

Dr. Harrison terminated the seminar by discussing some clinical and physiologic observations in relation to angina pectoris. He pointed out the common causes of difficulty in the interpretation of chest pain. He thought that exercise in patients with heart disease does no harm as long as their activity is below the symptom threshold. The chest motion studies that Dr. Harrison is interested in suggest that exertion in cardiac patients may even be beneficial.

JOHN B. HAMPTON, M.D.
TAMPA

Association News

Summary of Post-Convention Board of Governors Meeting May 13, 1962, Miami Beach

A.M.A. Delegate.—Elected Burns A. Dobbins, M.D., of Fort Lauderdale as A.M.A. Delegate to serve on Board of Governors this year.

Public Relations Officer.—Approved President Zellner's appointment of Leo Wachtel, M.D., to serve as Public Relations Officer.

Executive Committee.—Approved President Zellner's appointment of H. Phillip Hampton, M.D., Tampa, to serve as optional member of the Executive Committee to the Board of Governors. Other Executive Committee members are: President Robert E. Zellner, M.D., Orlando; Immediate Past President S. Carnes Harvard, M.D., Brooksville; President-Elect Warren W. Quillian, M.D., Miami; Secretary-Treasurer Samuel M. Day., M.D., Jacksonville.

Journal.—Appointed Thad Moseley, M.D., Jacksonville, Editor of The Journal and Charles K. Donegan, M.D., St. Petersburg, John M. Packard, M.D., Pensacola, and Franz H. Stewart, M.D., Miami, as Assistant Editors.

Delegate to Puerto Rico.—Requested Courtlandt D. Berry, M.D., to serve as fraternal delegate to the annual meeting of the Medical Association of Puerto Rico.

Research.—Reappointed for the coming year the following members of the Committee on Research: Millard B. White, M.D., Chairman; Nicholas A. Tierney, M.D., Karl B. Hanson, M.D., Martin G. Gould, M.D., and James J. Griffitts, M.D.

Council Reports.—Authorized and directed the Association's Council Chairmen to accept reports from the

(Continued on page 78)

OPPOSITE PAGE: 1. Dr. F. J. L. Blasingame, Executive Vice President, American Medical Association. 2. Dr. Durward G. Hall, member of the House of Representatives, United States Congress, the guest of President S. Carnes Harvard. 3. Mrs. Edward W. Ludwig of Jacksonville, President of the Woman's Auxiliary to the Florida Medical Association. 4. Following his installation, President Robert E. Zellner of Orlando affixes the Past President's Pin to Dr. Harvard's lapel. 5. At the President's Reception, left to right, Dr. and Mrs. Zellner; Mrs. Harvard and Dr. Harvard; Mrs. Charles T. Craddock, Mr. Craddock and their son, John Craddock. Mr. Craddock is managing director of the Americana Hotel. 6. The Board of Governors (back row, left to right) Dr. Ralph S. Sappenfield of Miami; Dr. Chas J. Collins of Orlando; Dr. H. Phillip Hampton of Tampa; Dr. Leo M. Wachtel of Jacksonville; Dr. Charles Larsen Jr. of Lakeland, and Dr. Burns A. Dobbins Jr. of Fort Lauderdale. Front row, left to right, Dr. Eugene G. Peek Jr. of Ocala, Speaker of the House; Dr. Edward L. Cole Jr. of St. Petersburg, Vice President; Dr. Warren W. Quillian of Coral Gables, President-Elect; Dr. Robert E. Zellner of Orlando, President; Dr. S. Carnes Harvard of Brooksville, Immediate Past President, and Dr. Samuel M. Day of Jacksonville, Secretary-Treasurer. Not shown: Dr. Henry J. Babers Jr. of Gainesville.


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Committees under their Councils, edit, summarize, consolidate and prepare for publication in the Delegates' Handbook.

1963 Annual Meeting.—Determined that the 1963 Annual Meeting of the F.M.A. be held at the Diplomat Hotel, Hollywood Beach, May 16-19, 1963 and to investigate the possibility of holding the Annual Meeting in Jacksonville in 1967.

Medical Examiners.—Nominated S. Carnes Harvard, M.D., to Governor Bryant for reappointment to the State Board of Medical Examiners.

Summary of Meeting of Scientific Council Held May 12, 1962

1963 Scientific Program.—Recommended to the Board of Governors that format of 1962 program be maintained.

Promotion of Postgraduate Courses.—All postgraduate courses, following affirmative action by the Committee on Postgraduate Education, are listed under the heading "Meetings" in The Journal and a news item is published.

The Journal

Cover Change.—Approved for publication in July and on each subsequent issue.

Special Issue.—The February, 1963, issue will feature the Brevard County Medical Society whose members will furnish the scientific material and most of the other features. The Editorial Board reserves the right of approval of all material.

Subscription Rates.—For new subscribers, the rate was increased from $5 to $7 per year immediately. The increase for present subscribers will be effective upon renewal.

Special Interest Page.—Florida Academy of General Practice will submit material of a philosophic nature. Other special interest groups will be urged to emphasize the scientific aspects of medicine.

Book Reviews.—Books received from the publisher will be listed periodically under the heading "Books Received," and a statement will follow to the effect that reviews will be published as space permits. Only exceptional books, in the opinion of the members of the Editorial Board, may be selected for review.

Abstracts.—Abstracts will be eliminated because of lack of reader interest. A reference to articles by Association members in other publications will be published.

References and Bibliographies.—Authors will be requested to limit their references to six in number.

Advertising Brochure.—The brochure prepared for mailing to prospective advertisers during the months of June and July was approved.

News

The scientific exhibit, "Cineangiograms—The Answers to Many Cardiac Riddles," presented by Dr. Frank LaCamera Jr. of St. Petersburg at the 88th Annual Meeting of the Florida Medical Association at Miami Beach won the First Place Award. Second Place Award went to the exhibit entitled "Physiological Stapedectomy" presented by Dr. J. Brown Farrior of Tampa and the Third Place Award to "Facets of Regional Perfusion" presented by Drs. Hayes McM. White Jr., Augusto Sarmiento, Thomas J. Baker, G. Thomas Samartino and Daniel S. Martin of Miami. The four Honorable Mention awards were presented to the exhibits entitled "Cardiac Arrest," Drs. Denis Cavanagh, Robert S. Litwak and James H. Ferguson of Miami; "Chronic Cough—Have You Missed the Diagnosis?" Drs. Thomas B. Ferguson, Richard G. Connar and Leffie M. Carlton Jr. of Tampa; "Surgery of the Hand," Florida Society of Plastic and Reconstructive Surgery, and "Evaluation of Thiophosphoramide in Metastatic Malignancy," Drs. Oscar W. Freeman and Cecil G. Butt of Orlando.

The Twelfth Annual Postgraduate Obstetric-Pediatric Seminar has been scheduled for August 16-18 in the Colonial Inn at St. Petersburg Beach. Dr. James M. Ingram of Tampa, Chairman of the Association's Committee on Maternal Health, is program chairman.

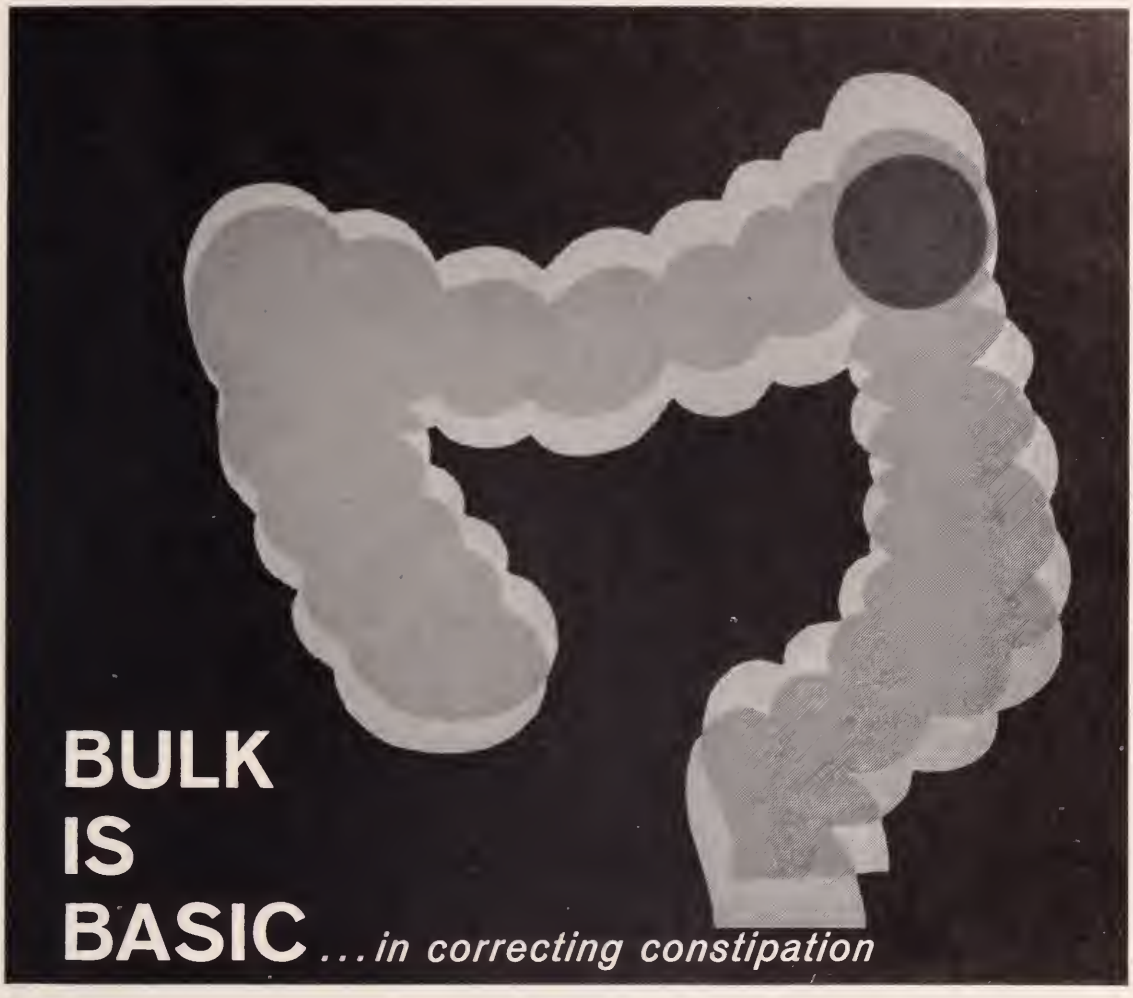
The Seminar in Neurology presented by the Division of Postgraduate Education of the University of Florida College of Medicine in Gainesville will be held September 27-29. Dr. Samuel P. Martin of Gainesville is Acting Director of the sponsoring Division of the College.

Among Florida physicians on the European Surgical Clinics Tour of the International College of Surgeons is Dr. Carl S. McLemore of Orlando. Dr. McLemore left for London on May 9 and returned on June 16.

Dr. Frederick L. Patry of Bradenton has been elected a Life Fellow of the American Orthopsychiatric Association.

The Third Annual Medical Seminar Cruise sponsored by the University of Florida College of Medicine is scheduled for October 29-November 5 aboard the MS Bergenjford. Information may be obtained from the Division of Postgraduate Education, College of Medicine, Gainesville.

The Florida Midwinter Seminar in Ophthalmology and Otolaryngology has presented a $2,000 gift to the Division of Ophthalmology and to the Division of Otolaryngology of the University of Florida College of Medicine in Gainesville.



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1. Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice, ed. 6, Baltimore, The Williams & Wilkins Company, 1955, p. 578.

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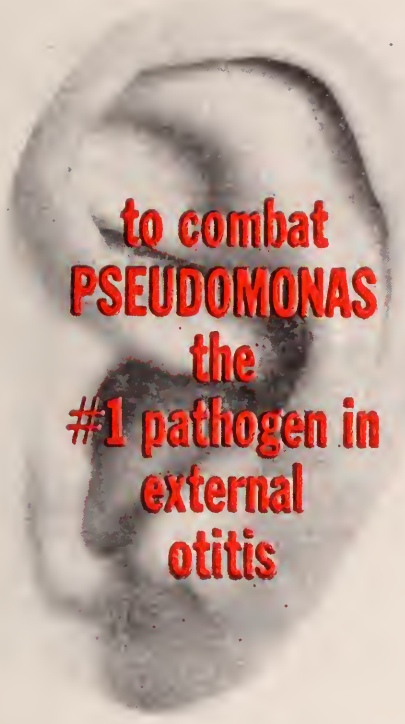
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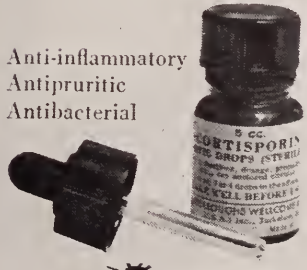
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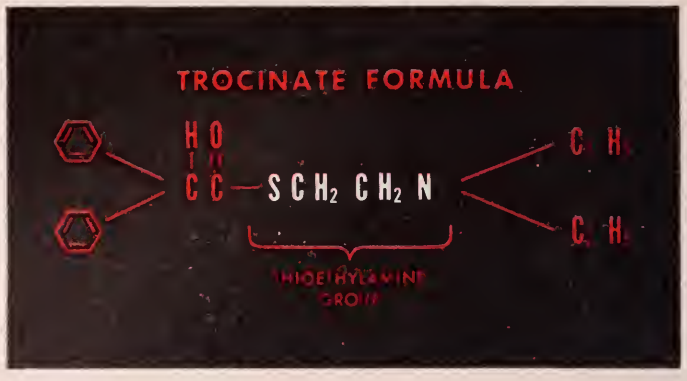


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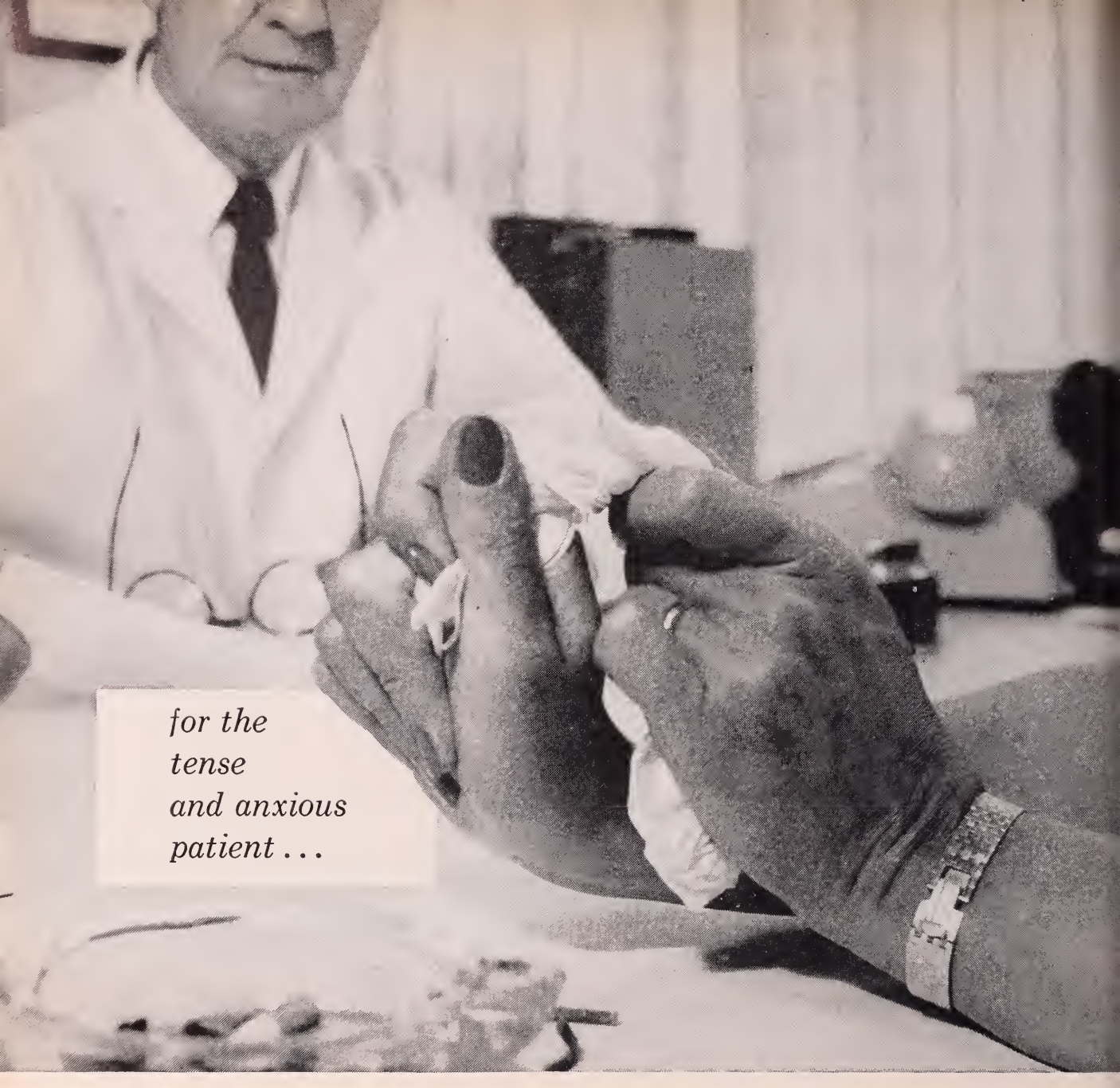
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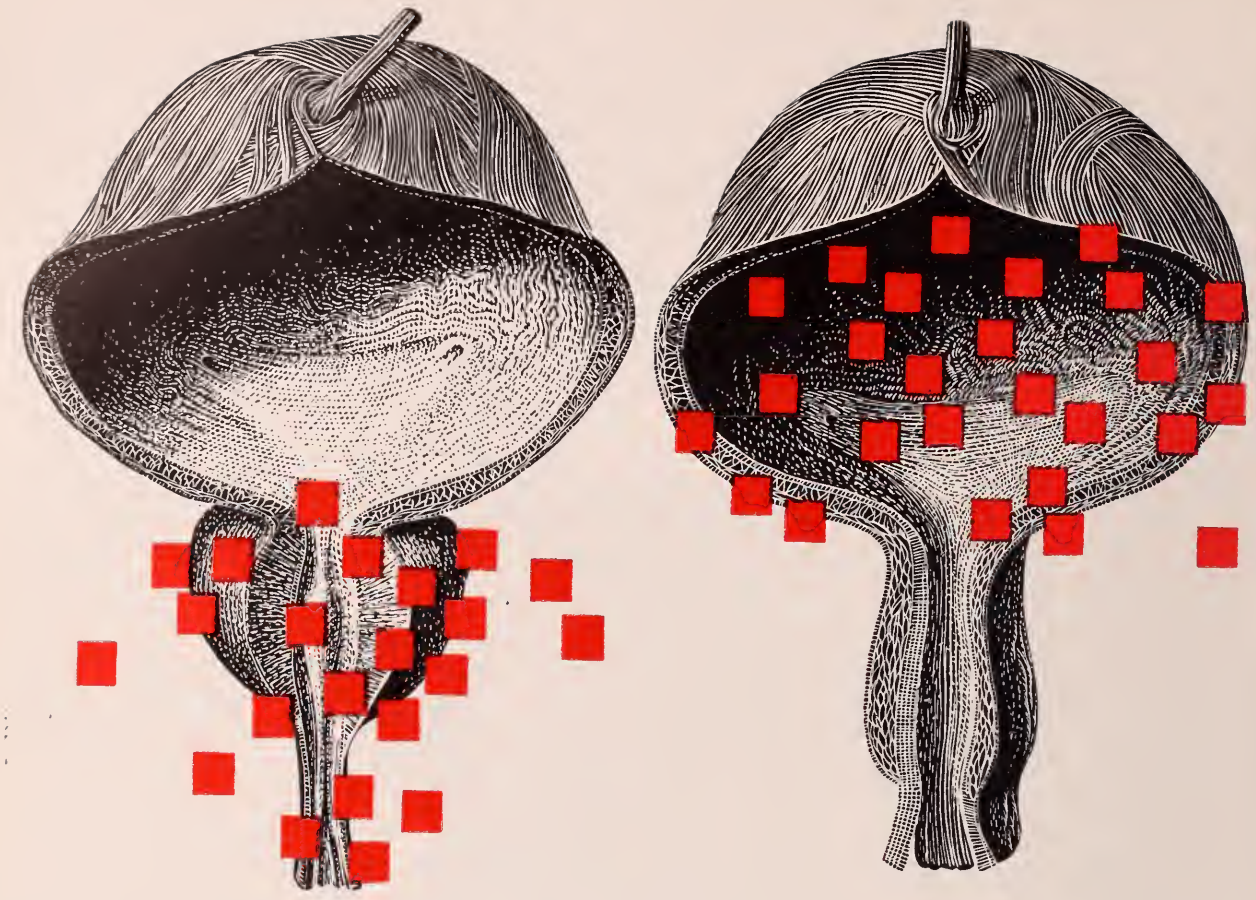


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Phenacetin	97 mg.	Hyoscyamine sulfate	0.016 mg.
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References: 1. Carpenter, E. B.: South. M. J. 51:627, 1958. 2. Hudgins, A. P.: Clin. Med. 8:243, 1961. 3. Lamphier, T. A.: J. Abdomin. Surg. 3:55, 1961. 4. Levine, I. M.: Med. Clin. N. America 45:1017, 1961. 5. Meyers, G. B., and Urbach, J. R.: Penna. M. J. 64:876, 1961. 6. Perchuk, E., Weinreb, M., and Aksu, A.: Angiology 12:102, 1961. 7. Poppen, J. L., and Flanagan, M. E.: J.A.M.A. 171:298, 1959. 8. Schaubel, H. J.: Orthopedics 1:274, 1959. 9. Steigmann, F.: Am. J. Nursing 61:49, 1961.

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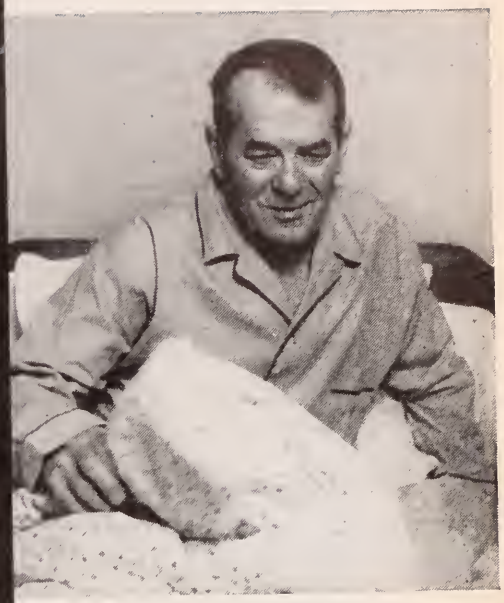


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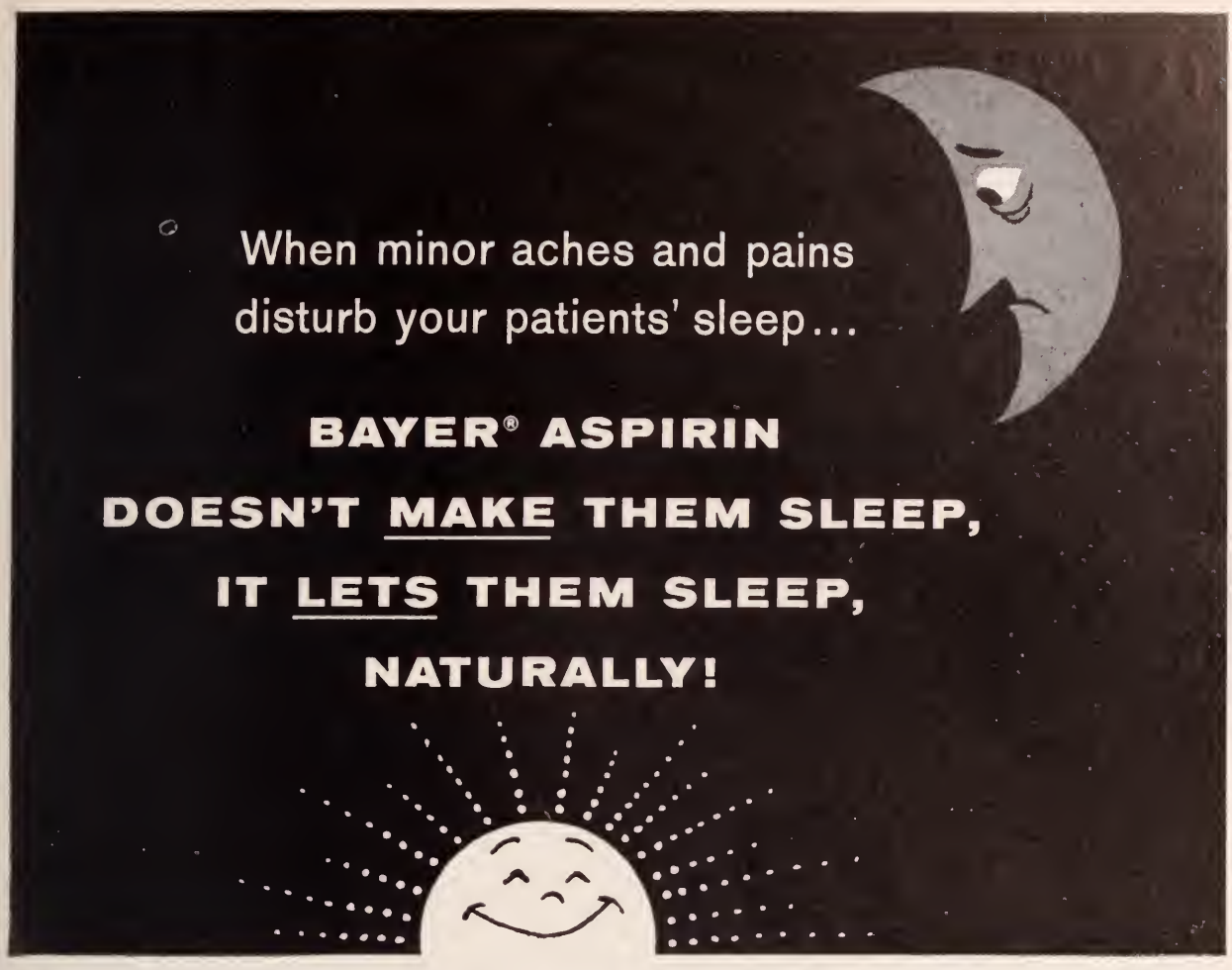
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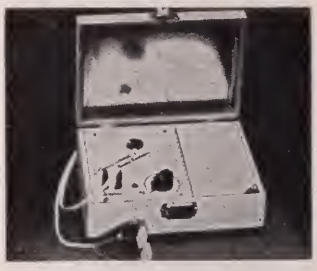


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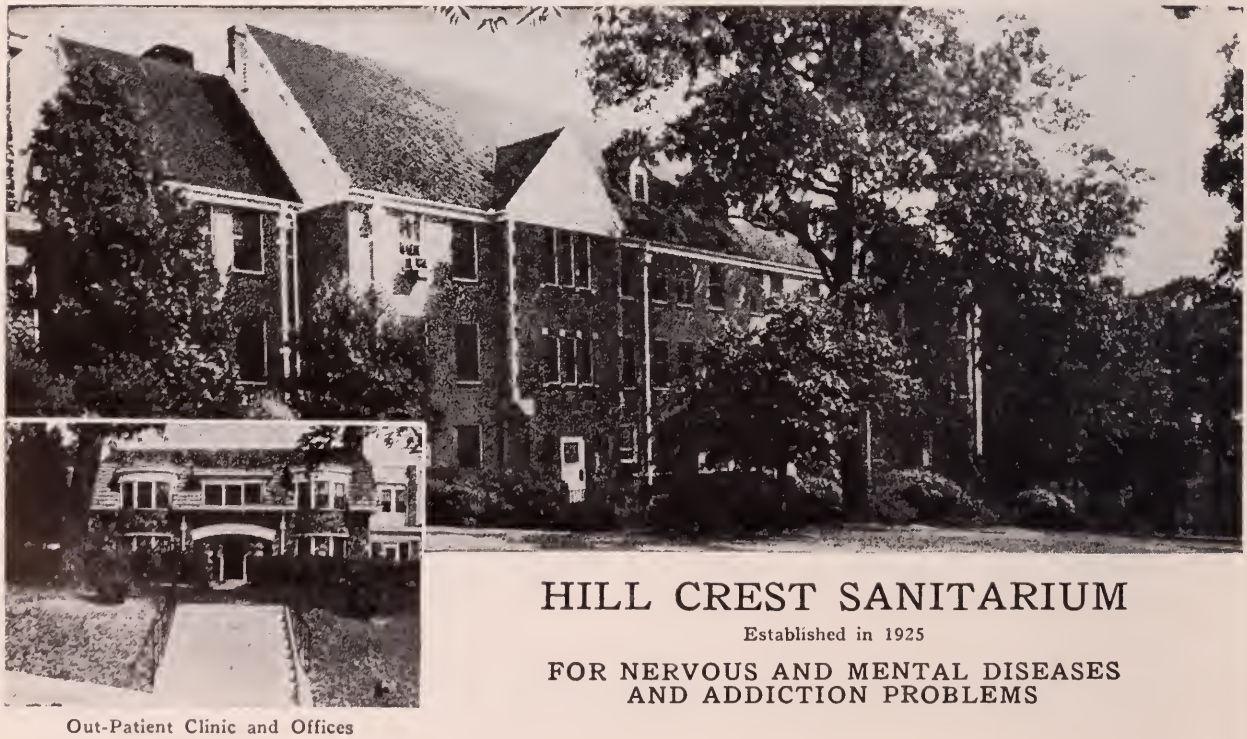
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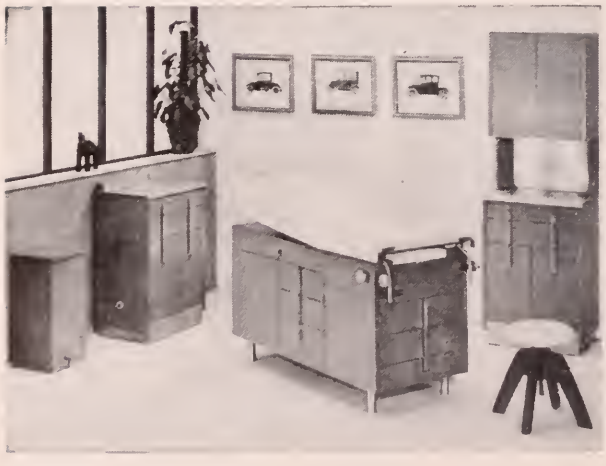
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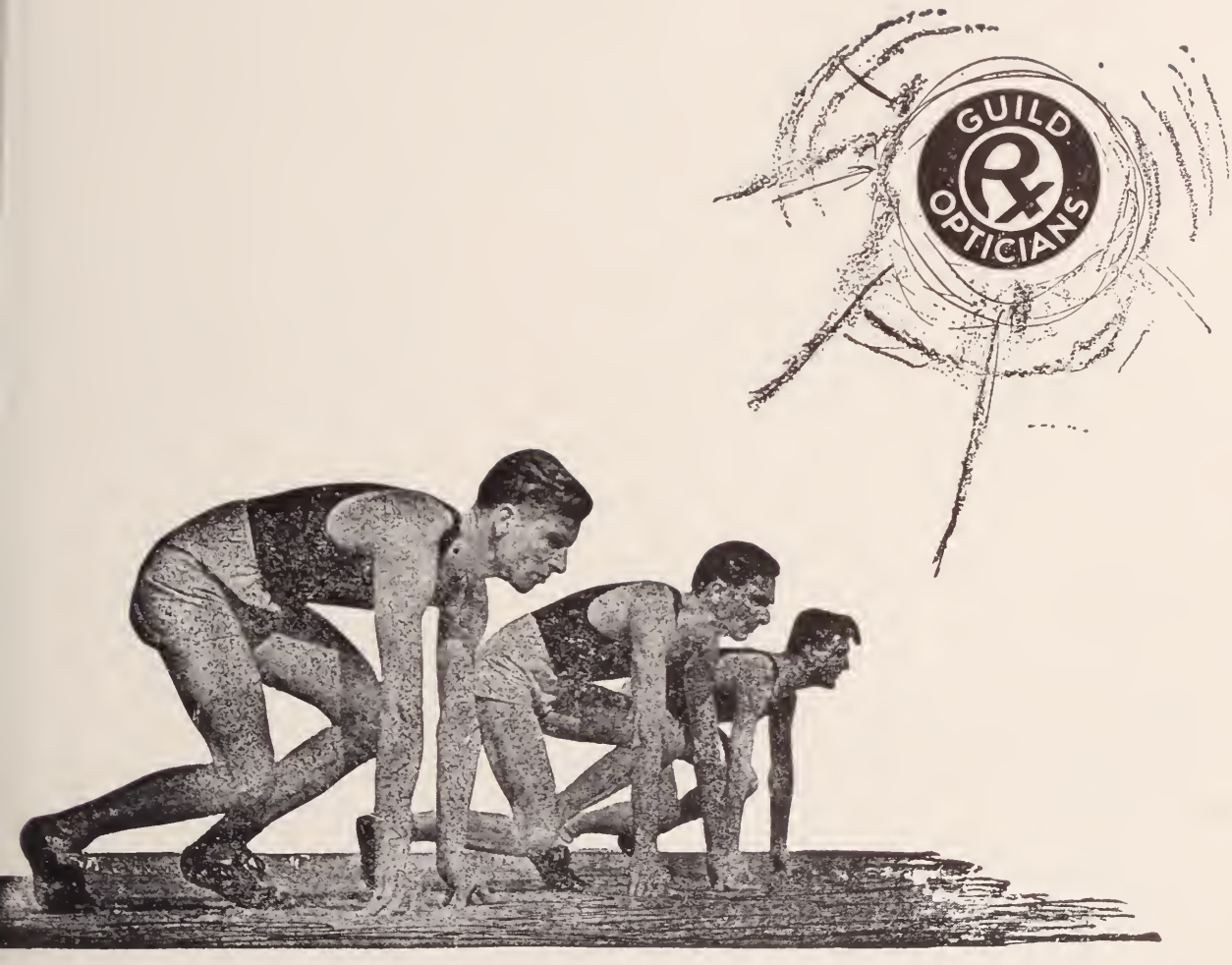
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1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

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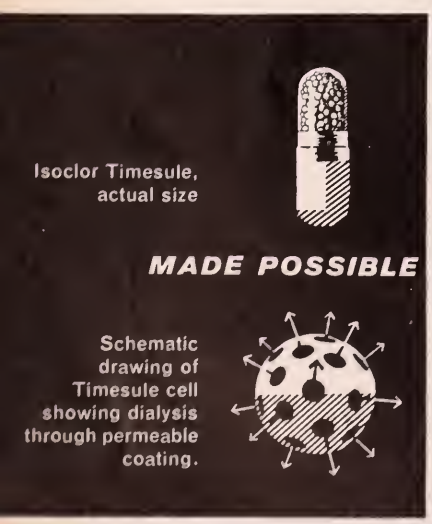
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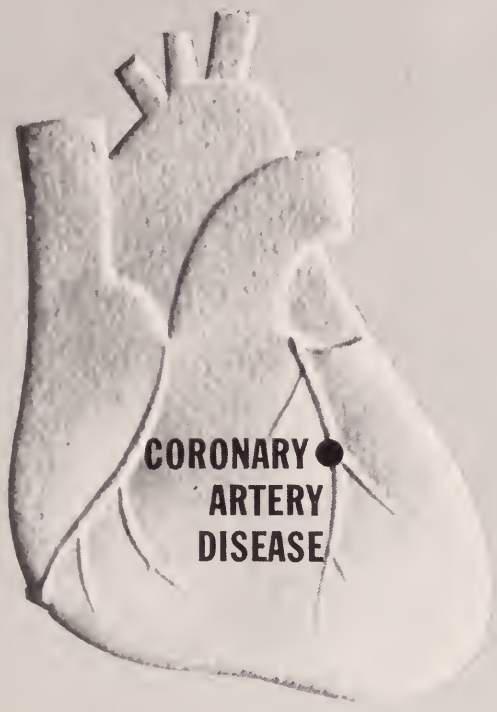
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References: (1) Root, H. F., and Bradley, R. F., in Joslin, E. P.; Root, H. F.; White, P., and Marble, A.: The Treatment of Diabetes Mellitus, ed. 10, Philadelphia, Lea & Febiger, 1959, pp. 411, 437. (2) Joslin, E. P.; Root, H. F.; White, P., and Marble, A.: *ibid.,* pp. 188-189. (3) Marks, H. H., *et al.:* Diabetes *9*:500, 1960. (4) Marble, A., in Summary of Conference on Diabetic Retinopathy, Survey Ophth. (Part 2) *6*:611-612, 1961.

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August, 1962
Vol. XLIX, No. 2

The JOURNAL of the Florida Medical Association

EDWARD R. ANNIS, M.D., PRESIDENT-ELECT OF THE AMERICAN MEDICAL ASSOCIATION

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of the Florida Medical Association

Volume XLIX, Number 2, August, 1962

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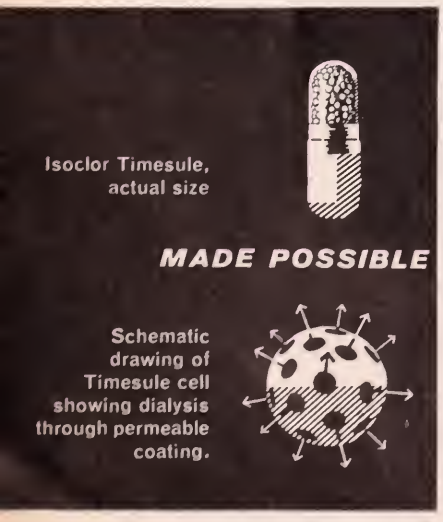
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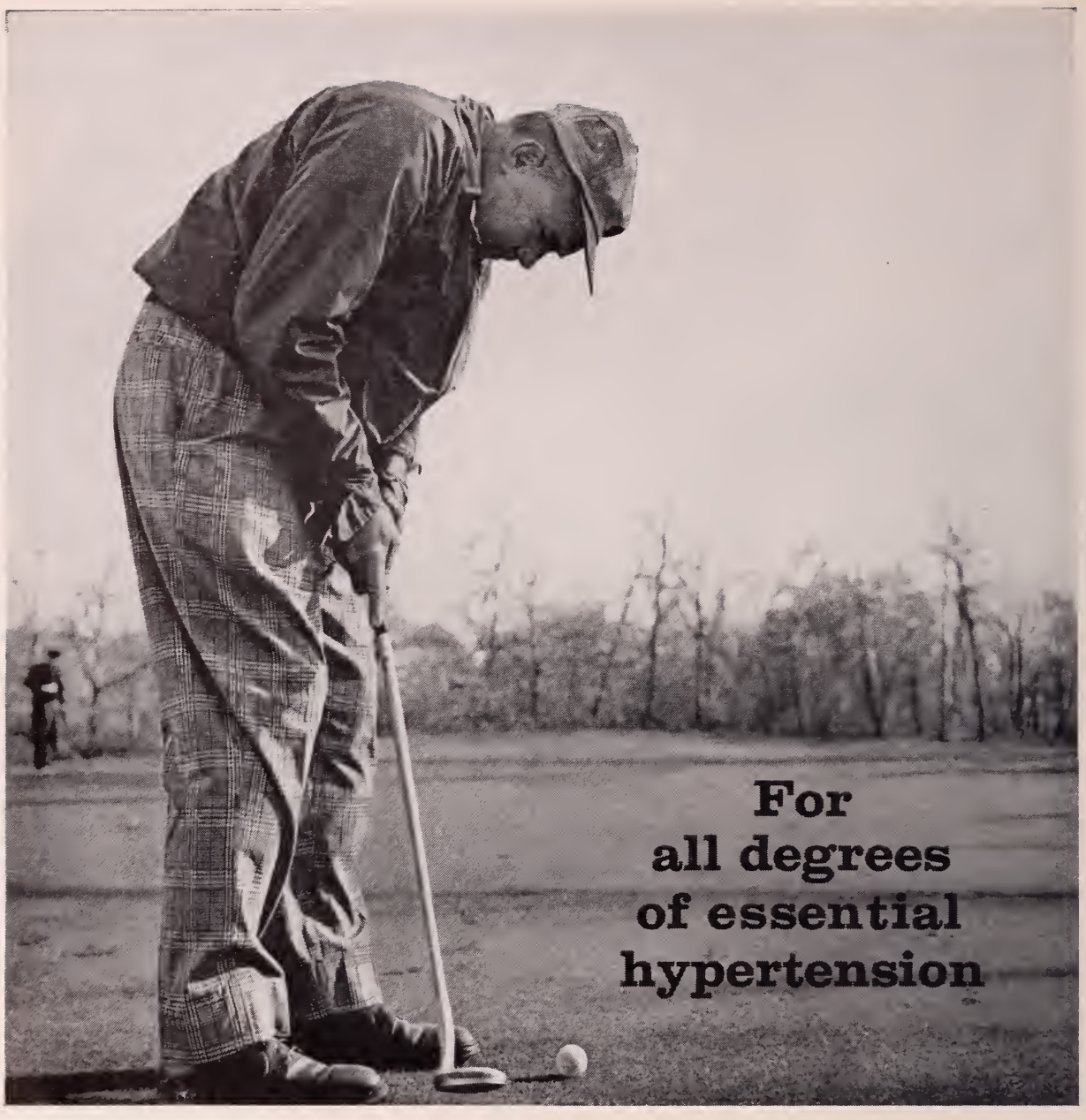
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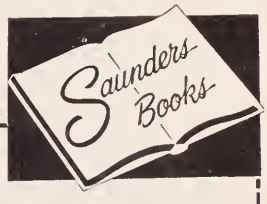
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1. Hodges, F. T.: *GP* 14:86, Nov., 1956.
2. Guild, B. T.: *Arch. Dermat.* 51:391, June, 1945.

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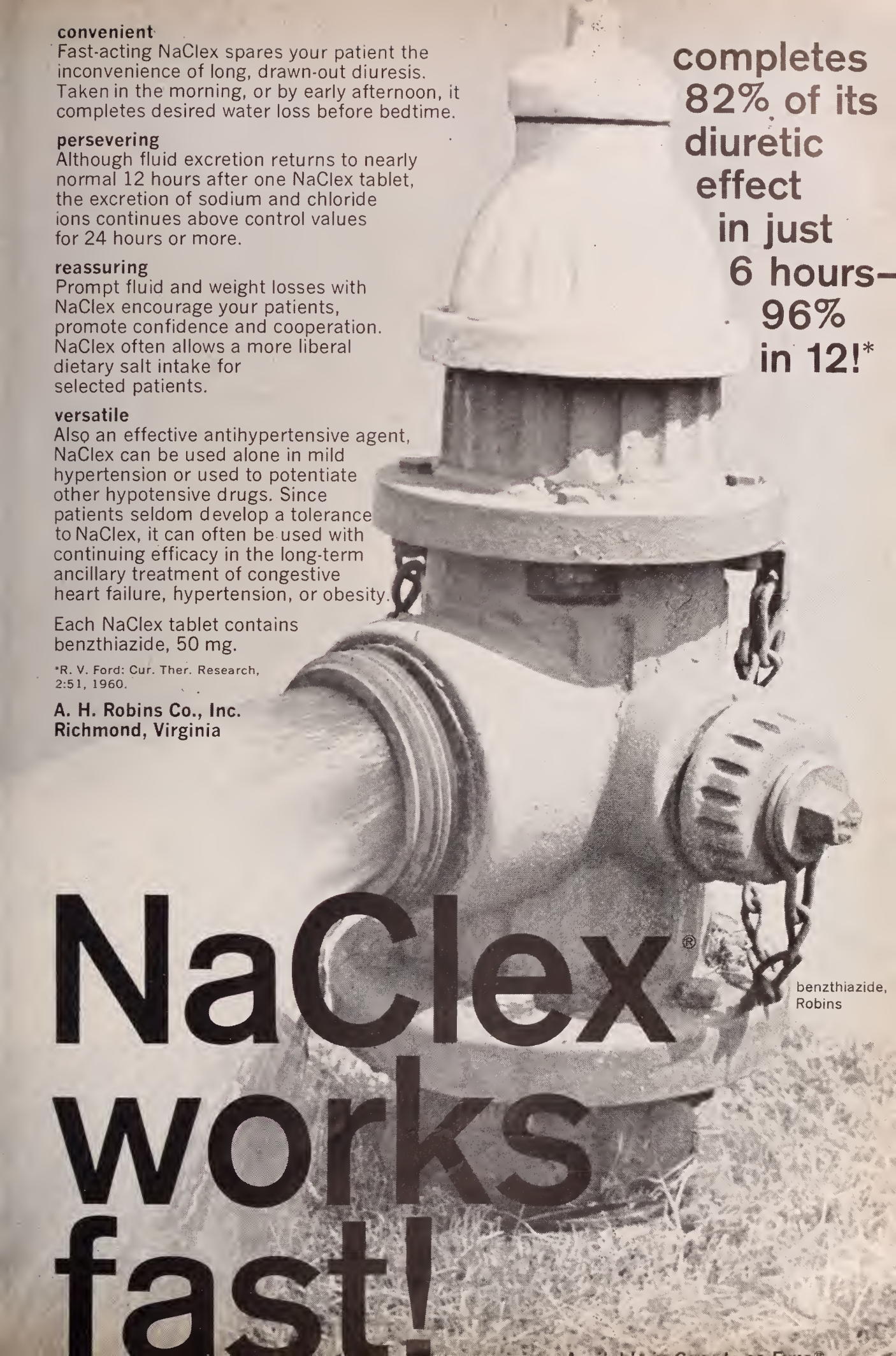
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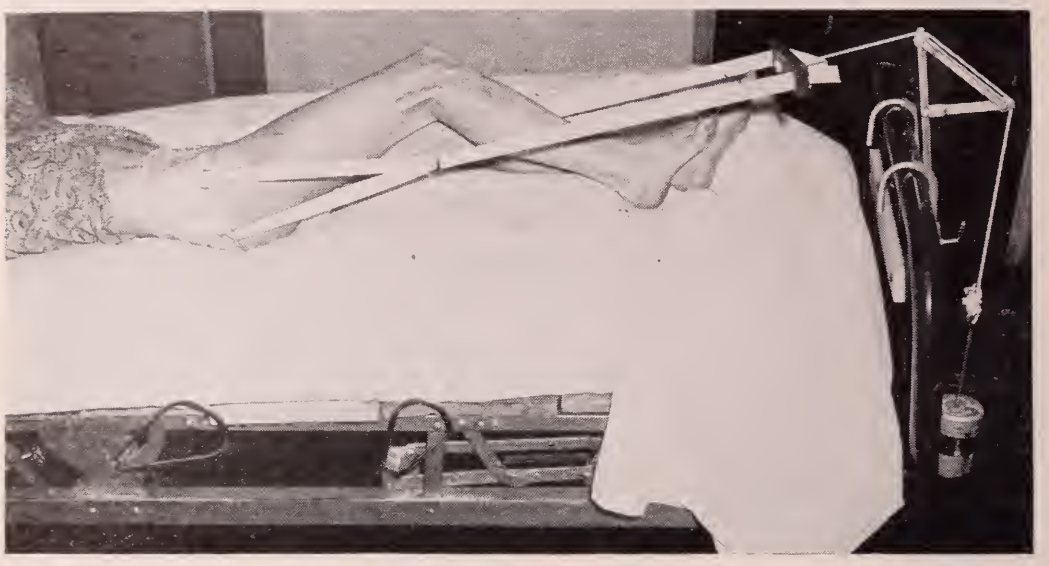
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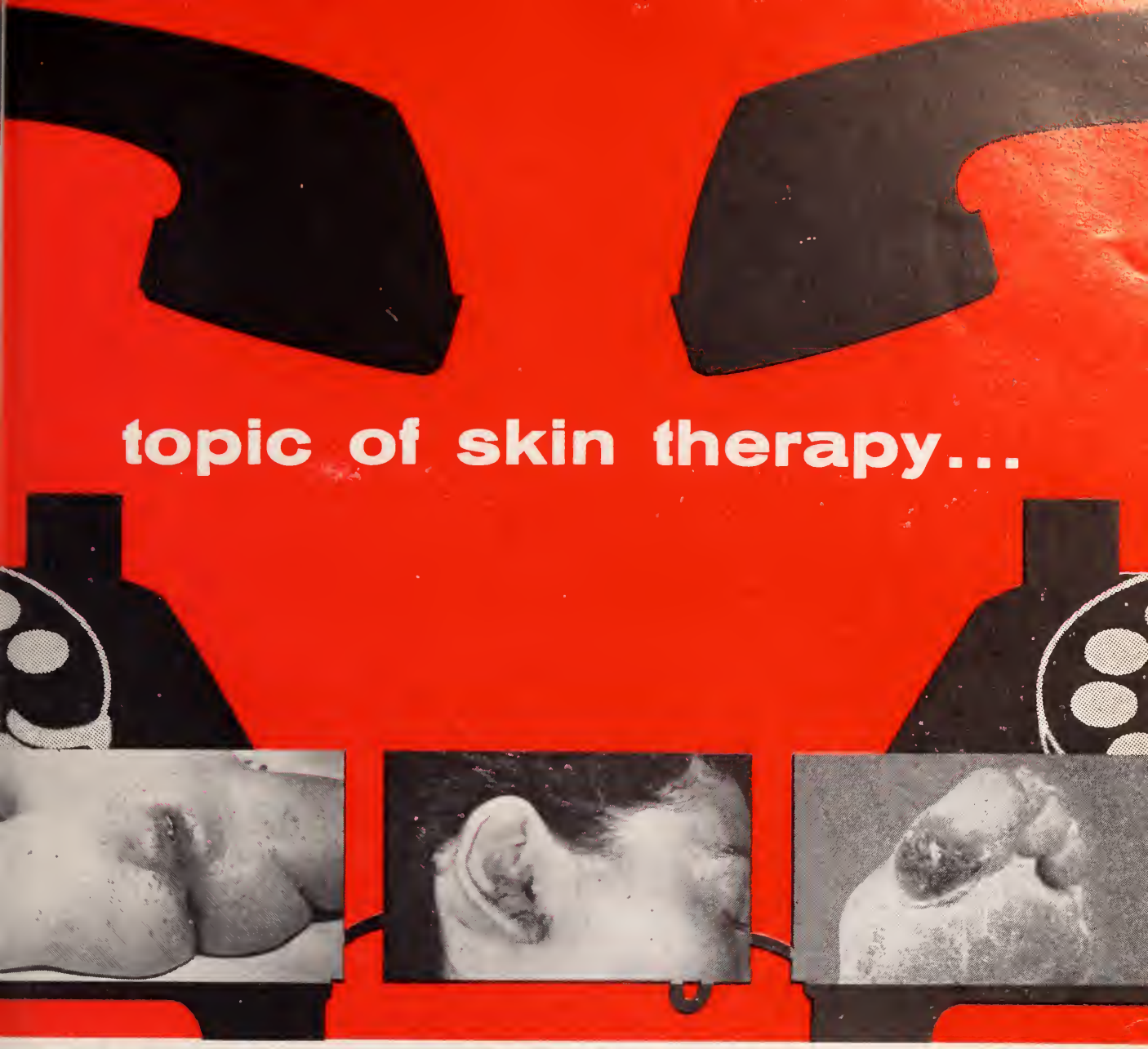
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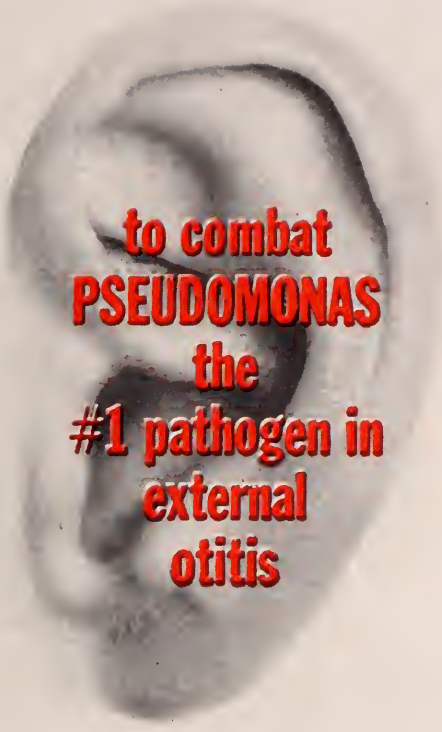
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1. Borota, A., and Grinell, R.N.: J. Amer. Geriatrics Soc., 10:413, 1962.
2. Spoor, H. J.: N.Y. State J.M. 58:3292, 1958.
3. Lubowe, I. I.: Western Med. 1:45, 1960.
4. Weissberg, G.: Clin. Med. 7:1161, 1960.



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Other Real Estate Owned		243,004.27
Investment in First Real Estate Mtg.		671,680.00
Prepaid Expenses		193,091.90
Other Resources		603,377.37
Customers Liability A/C Letters of Credit		78,864.42
Accrued Interest and Income Receivable	$ 2,519,516.39	
U. S. Government Securities	215,663,456.86	
Florida County and Municipal Bonds	38,290,948.35	
Other State and Municipal Bonds	8,068,525.33	
Federal Reserve Bank Stock	1,668,750.00	
Other Securities	322,493.82	
Cash on Hand and Due from Banks	157,844,004.43	424,377,695.18
		$651,176,692.23

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Surplus	31,645,000.00	
Undivided Profits	4,405,801.02	
Reserve for Contingencies	3,751,939.52	68,402,740.54
Reserve for Taxes, Interest, Etc.		2,561,207.14
Interest & Income Collected, Not Earned		3,944,631.25
Bills Payable		2,500,000.00
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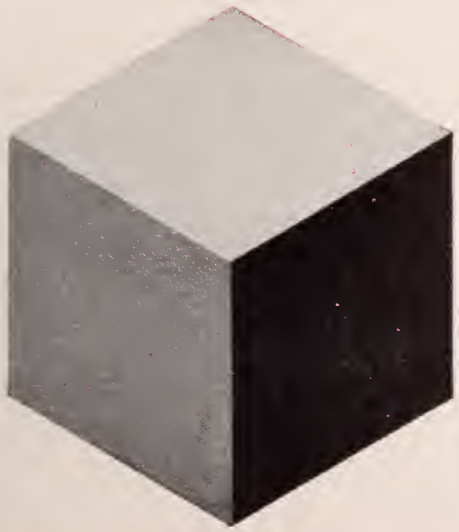
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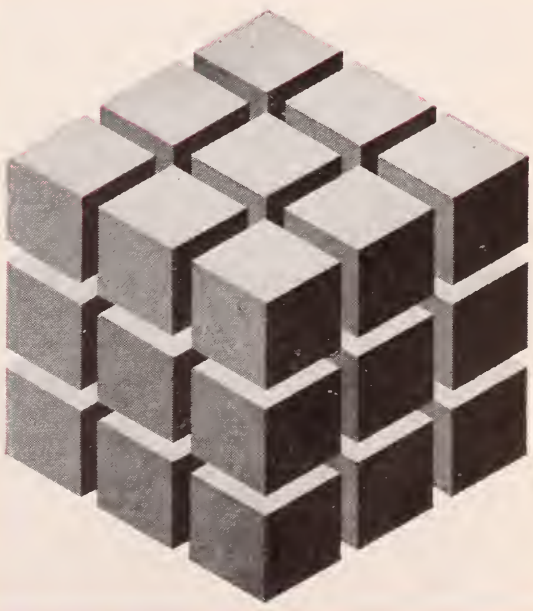
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Temporary Healing of a Cancerous Gastric Ulcer

Frank C. Bone, M.D. and Robert A. Broome Jr., M.D.
ORLANDO

The management of gastric ulcer is a controversial subject. Because of the possibility of carcinoma, Lahey[1] advocated surgery without a preliminary trial of conservative therapy. Others[2-5] believe, however, that a trial of medical therapy is justified since the majority of gastric ulcers are benign and will heal without surgery. Thus, needless surgery, with its mortality risk and postgastrectomy morbidity, will often be avoided. Roentgen and gastroscopic findings, the location of the ulcer, the presence or absence of free acid in the stomach, and the presence or absence of occult blood in the stool all help to determine whether an ulcer is benign or malignant. Unfortunately, however, even though all of these factors may point toward benignity, the ulcer may still be cancerous.[6] Ultimately then, the most helpful factor in making the decision regarding surgery is whether or not there is healing of the ulcer after three or four weeks of conservative therapy. The failure of an ulcer to heal does not necessarily mean that it is malignant, but its persistence after adequate therapy certainly constitutes an indication for surgery because of the possibility of cancer. On the other hand, if after a trial of medical therapy the ulcer has healed, one can assume the ulcer to be probably benign and continue conservative management with further roentgenologic follow-up. It is important that the patient be followed closely for years since one who has had a gastric ulcer seems more susceptible to the development of cancer of the stomach even five or more years later.[7] Moreover, with conservative therapy, malignant ulcers at times decrease in size and may even heal. Such reports are few.[6]

The healing of a malignant gastric ulcer both by x-ray and gastroscopy has been observed. Because of the implications of this phenomenon and because such reports are few, our case is herewith summarized.

Report of Case

A 50 year old white, married, housewife reported for examination on April 22, 1952, complaining of stomach trouble of two years' duration, consisting of sour stomach and belching. This usually occurred one or two hours after meals, but never awakened her at night. For one week a nagging pain in the left upper quadrant of the abdomen had been present almost constantly, associated with nausea, vomiting and anorexia. The pain had been temporarily relieved by milk. There had been no loss in weight or gastrointestinal bleeding. The past history, aside from a history of asthma, was unremarkable. Physical examination revealed a well developed and nourished woman who did not appear acutely ill. She weighed 137½ pounds; the blood pressure was 120/80 mm. Hg; the thyroid gland was palpable, but not significantly enlarged. Abdominal examination showed no masses or organs, and the remainder of the examination yielded nothing of significance.

The hemoglobin estimation was 13.6 Gm., and the white blood cell count was 12,800 with a normal differential; the urine was normal; the VDRL was negative; and a stool specimen was negative for occult blood. Gastric analysis showed 10 degrees of free acid in the fasting specimen and 86 degrees of free acid following stimulation with histamine. The gastrointestinal series (fig. 1) on April 25 showed a large ulcer crater 2 cm. in width, and 1 cm. deep in the mid portion of the stomach on the greater curvature. The ulcer appeared to be intraluminal, and the margins were irregular. It was fixed to surrounding structures. The initial impression was that this was a carcinomatous ulcer. Surgery was advised but refused, and

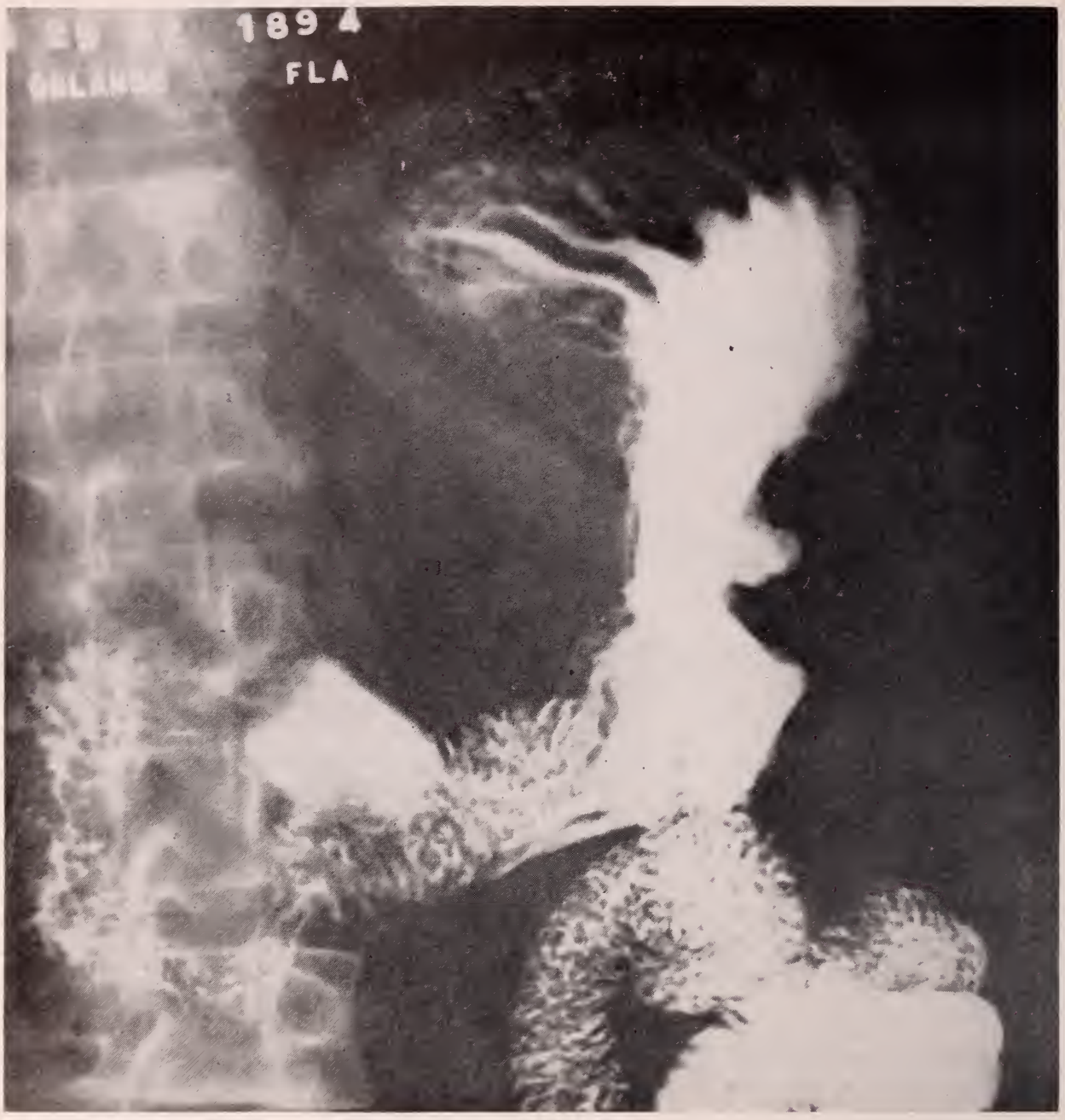


Fig. 1. — Gastrointestinal x-ray on April 25, 1952, showing the large ulcer on the greater curvature of the stomach.

the patient was given a bland diet with frequent feedings, Banthine, Gelusil, and Mebaral. After three days on this regimen she became asymptomatic. A gastrointestinal series on May 22, approximately one month after the first examination, showed only a questionable small crater at the site of the previous ulcer, but this area of the stomach still was fixed to surrounding structures. On May 27 gastroscopy was performed and good visualization obtained. Just proximal to the antrum, on the greater curvature side, raised folds were seen radiating to a point. The mucosa appeared normal, and no ulceration was seen. It was thought that this configuration of stellate folds represented healing of the gastric ulcer. When the gastrointestinal series was repeated on June 16 (fig. 2), this area was still fixed, but no definite ulcer crater could be identified.

During this time the patient had remained completely asymptomatic, and her weight had remained unchanged. The medications were discontinued after two months, but the bland diet was continued. She remained asymptomatic for approximately four months altogether, after which time the pain recurred. A gastrointestinal series on September 3 showed a recurrence of the gastric ulcer on the greater curvature which was one third larger than it had been at the time of the first examination. With recurrence of the ulcer the patient agreed to surgery, and at operation on September 11 performed in the Orange Memorial Hospital by Dr. Duncan T. McEwan a large, hard tumor mass was found on the greater curvature. Many metastases were noted on the surface of the small bowel. Microscopically this lesion was an ulcerating adenocarcinoma, grade 4, with extension through the gastric wall into the regional lymph nodes and the omental tissues. A metastatic lesion in the left ovary also was found. A palliative gastrectomy was performed, and thereafter ascites and edema developed. The patient gradually failed and expired on Feb. 25, 1953. An autopsy was not performed.

Comment

At the time of the first x-ray study, the ulcer was thought to be cancerous primarily because of its location on the greater curvature. Most ulcers in this location are cancerous[8] although a number of benign ones have been reported.[9,10] This patient refused surgery, and the ulcer healed under medical treatment. Although healing occurred, this portion of the stomach was found by x-ray to remain somewhat rigid and fixed to surrounding structures. It was thought, both clinically and by x-ray, that the ulcer had previously perforated and been walled off, and that the residual changes were due more likely to this process than to neoplasm. This feeling was strengthened by the observation that the mucosal pattern appeared normal over the involved area, rather than showing evidence of infiltration as observed by Palmer.[2] He reported the healing of a peptic ulcer in a carcinoma and stressed the importance of mucosal relief x-ray studies in detecting infiltration. On the basis of the x-ray findings in the present case, it must be pointed out that even in the absence of mucosal changes, fixation of the stomach wall to surrounding structures may be due to neoplasm as well as to prior perforation, and its presence warrants surgical exploration.

In this case complete epithelization of the ulcer crater occurred since the presumed site of the ulcer was seen on gastroscopic examination. It is possible that the ulcer site was not actually visualized, but the examination was satisfactory and the site of this ulcer is ordinarily readily accessible to gastroscopy. Apparently the carcinoma ulcerated because of interference with blood supply which made the mucosa more susceptible to the high acid content of the gastric juice. The ulcer regimen, then, by causing a diminution of secretion of acid and by neutralization of that formed, caused the ulcer to heal.

The presence or absence of ulcer pain during treatment is rarely mentioned as being of aid in determining whether an ulcer is benign or malignant. There is certainly a tendency, however, to think that if a patient has no pain or other symptoms, an ulcer is probably benign. The fact that this patient had no ulcer pain or digestive symptoms of any kind for four months after therapy was begun illustrates the fallacy of this idea. The lack of pain was not due to medications because she took none for the two months before the ulcer recurred. One might argue that this was benign ulcer that underwent malignant degeneration. This seems highly unlikely in view of the short time interval, the similarity of the ulcer craters and the appearance of the pathological specimen which showed the carcinoma to extend out from the crater in all directions.

It is difficult to differentiate a benign from a malignant ulcer.[1-3,7,11] Frequently, the most important differentiating point is the healing of the ulcer after a trial of medical therapy. It is discouraging to observe the healing of an ulcer with subsequent recurrence at which time it is found to be malignant and incurable. In all probability, however, the ulcer had perforated through the wall of the stomach by the time the patient was first seen and even at that time could not have been cured by surgery.

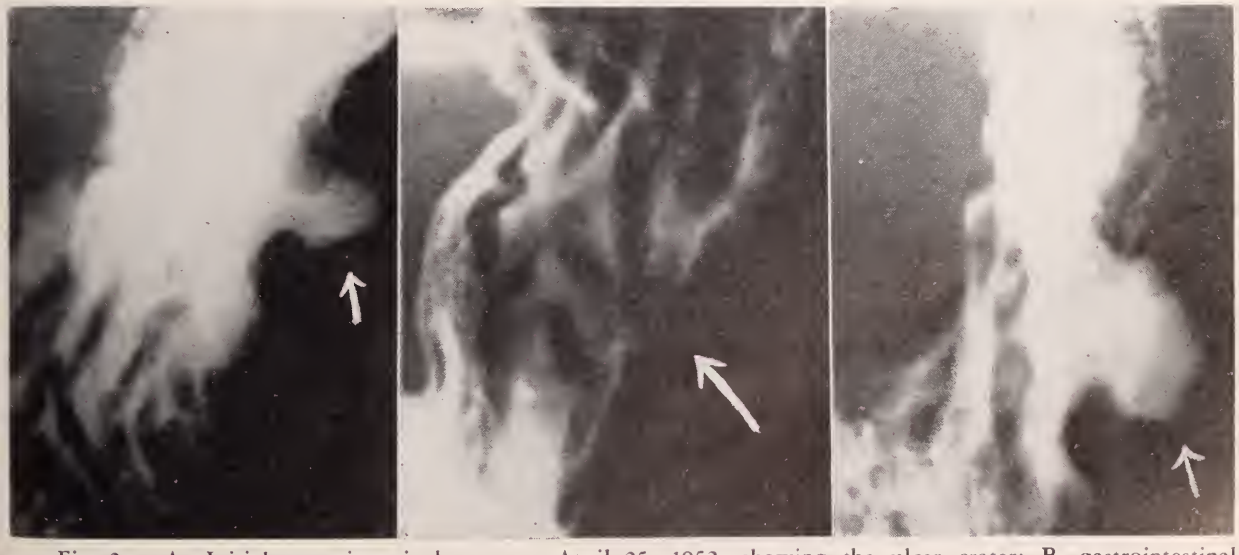


Fig. 2. — A. Initial gastrointestinal x-ray on April 25, 1952, showing the ulcer crater; B. gastrointestinal x-ray on July 16, showing healing with folds radiating to the site of the previous ulcer; C. gastrointestinal x-ray on September 3, showing recurrence of the ulcer.

Summary

A case is presented of a 50 year old woman with a gastric ulcer of the greater curvature that healed after four weeks of conservative therapy. She remained asymptomatic for four months, after which the ulcer recurred. At surgery, the ulcer was found to have been carcinomatous from the beginning. If, following the healing of a gastric ulcer, any marked mucosal alteration, rigidity or fixation to surrounding structures can be detected, the abdomen should be surgically explored because of the possibility of malignany.

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Nonicteric Viral Hepatitis in Children

Harry Kaufman, M.D. and David Multach, M.D.
NORTH MIAMI BEACH

Viral hepatitis is a disease epidemic in nature, characterized by hepatic involvement, tenderness of the liver and jaundice. The purpose of this article is to mention variations in symptoms and to alert the practitioner handling children to the strong possibility that infectious hepatitis may occur without any of the familiar warning signs.

For many years it has been well documented that anywhere from 33 per cent to 97 per cent of viral hepatitis cases are nonicteric.[1-4] These nonicteric cases occur especially in infants and younger children and are detectable only by laboratory tests of liver function. If, therefore, one considers the diagnosis of the relatively common disease of viral hepatitis only in those patients with overt jaundice, it is obvious that many cases will be overlooked.

There are several reasons why the diagnosis of nonicteric hepatitis is not frequently considered in everyday practice in spite of its high occurrence rate. First, the studies showing the high rate were usually made in orphanages or institutions, with the nonicteric cases being accidentally discovered during routine surveys following a known infection, with the implication that these cases occur only in epidemics. Secondly, it has been assumed that the nonicteric cases were the milder ones and, therefore, unworthy of note. Actually, the nonicteric cases occur endemically in the same proportion as in the icteric cases, and, in addition, maintain abnormal liver function tests for periods equal to those in the icteric cases; they also have equal relapse rates (10 per cent).[4]

An enlarged or tender liver is the only sign, other than jaundice, which makes one suspicious of viral hepatitis. Yet, this sign too is present in only about one half the cases.[5]

Until the introduction of serum glutamic oxaloacetic transaminase testing (SGOT), the diagnosis of hepatitis in patients without jaundice was

From the Departments of Pediatrics, North Miami General Hospital and Cloverleaf Hospital.

Table 1. — Summary of Cases

Case	Age	Sex	Chief Complaint	Other Symptoms	Physical Findings	Chest X-ray
1	11 yrs.	Male	Vomiting	Fever, headache, abdominal pain	Hepatosplenomegaly Lymphadenopathy	Negative
2	10 yrs.	Male	Vomiting	Abdominal pain, fever	Abdominal tenderness	Negative
3	5 yrs.	Female	Abdominal pain	Anorexia, fever	Abdominal tenderness	Negative
4	14 mos.	Male	Persistent fever	None	Negative	Negative

Table 2. — General Laboratory Results

Case	Hemoglobin in Grams	White Blood Cell Count	Polymorphonuclears	Lymphocytes	Monocytes	Stool Cultures	Ova and Parasites	Heterophil Agglutination	Erythrocyte Sedimentation Rate
1	12.6	6,100	68	28	4	Negative	Negative	1:28	
2	14.2	8,500	67	33		Negative	Negative	1:28	14
3	11.6	15,350	80	15	8	Negative	Negative	1:7	14
4	11.1	11,900	48	50	2			1:7	

Table 3. — Liver Function Tests

Case	SGOT	SGOT Duration Abnormal in Days	Cephalin Flocculation	Total Protein	Albumin	Globulin	Total Bilirubin	Thymol Turbidity	Urobilinogen in Urine	Prothrombin Time
1	500	20	4 +	6.25	4.3	9.0	0.30	4.9	Negative	15 sec.
2	215	9	4 +	6.2	3.5	2.7	0.90	1.6	Negative	14 sec
3	68	7	4 +	6.8	4.4	2.4	0.45	2.0	Positive	
4	90	10	4 +				0.65		Negative	

difficult and uncertain. This single test has now proved reliable, and, while not completely specific, is elevated only in liver cell damage or heart muscle damage.[6] In children, in particular, an extremely low incidence of abnormal SGOT was found in normal patients. The SGOT is the earliest liver function test to rise in hepatic disease, and has been shown to be the most useful single test. When taken in combination with another liver test, cephalin flocculation, the SGOT may be considered quite reliable.[6-10]

In the past six months, we, in a two man private pediatric practice, have treated four cases of nonicteric viral hepatitis which we are presenting. During this period of time we had no cases of hepatitis with icterus, and there was no epidemic of hepatitis in this area.

The four cases are summarized in tables 1-3. The ages of the patients ranged from 14 months to 11 years. The chief complaint in two patients was intractable nausea and vomiting for several days to a point of dehydration. The third case presented with severe abdominal pain without localizing signs, and the patient was admitted as a possible candidate for abdominal surgery. The fourth case was one of persistent fever with no other findings. On physical examination, none of the patients had jaundice, and only one of the children had hepatomegaly. All cases were diagnosed on the basis of an elevated SGOT in combination with a 4 plus cephalin flocculation. Thymol turbidity was borderline in one case, normal in two cases, and not ascertained in the fourth case. Total bilirubin remained normal in all. Total proteins, albumin-globulin ratios, erythrocyte sedimentation rates and prothrombin times were within normal limits in all cases in which the tests were performed. As reported in other surveys, the SGOT returned to normal quickly, in from seven to 20 days, but the cephalin flocculation remained abnormal for months afterward.

In the differential diagnosis, first, infectious mononucleosis was considered, but heterophil agglutination was normal in all four cases. There was no history of chemical or drug ingestion, such as chloroform or carbon tetrachloride, in any of the cases. Stools were negative for pathogens, and for ova and parasites, including amebas. None of the four children had a history of transfusions. Only one child, the 14 month old infant, had had an inoculation in the prior three months.

All four patients made uneventful clinical recoveries after symptomatic therapy. There were no relapses.

Summary and Conclusion

A summary of four cases of nonicteric viral hepatitis is presented. In as high as 97 per cent of the cases of infectious hepatitis in children jaundice may not be present. In about one half the cases there is no enlargement or tenderness of the liver. Infectious hepatitis occurs endemically as well as epidemically and may present with any one or any combination of the following strictly nonspecific symptoms: fever, malaise, chills, anorexia, nausea and vomiting, headache, lymphadenopathy and abdominal pain. Only a high index of suspicion will lead one to order the single quick, yet accurate screening test: serum glutamic oxaloacetic transaminase (SGOT). Since nonicteric cases are usually unrecognized and since it is known that the disease is not uncommon in children, it may well be responsible for many cases of obscure illness. Recognition is of importance because, in addition to the obvious reasons, there is the danger of contagion as well as the possibility of permanent hepatic damage in the future.

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Clinical Effectiveness of Bisacodyl as a Laxative in Mentally Defective Patients

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In the care of mentally defective patients constant attention to bowel hygiene is a particular necessity as their proneness to constipation is matched only by their indifference to their lack of regularity. Of necessity, in institutions devoted to the care of such patients countless hours of valuable time are spent in the time-consuming process of administering enemas.

In the search for an alternative, less burdensome method of treatment attention is drawn to a relatively new agent, bisacodyl (Dulcolax). This agent, which is effective by both oral and rectal routes, is reputed to act by reflexly producing large bowel peristalsis on contact with the colonic mucosa.[1] A number of clinical reports favorable to its use have made their appearance.[2-13] These have embraced the use of the drug not only in treatment of constipation but also for radiologic,[2,4,11] endoscopic,[2,8] and general operative procedures.[3] Among these reports those of Clark,[7] Pincock[12] and Mandel and Silinsky[13] describe exceptionally favorable results in chronically ill, bedridden patients. Although the patients treated by these investigators were all in the geriatric age group and not specifically mentally defective, the problem they presented appears in many ways comparable to that presented by mentally defective patients of a younger age group. In all three studies the results were such that they indicated distinct advantage over the enema with resultant saving of valuable nursing time. Accordingly, a study was conducted to determine if these results could be reproduced in hospitalized, mentally defective patients.

Medical Director, Sunland Training Center at Orlando.

Plan of Study

Clinical trial was given to bisacodyl in 505 retarded institutionalized patients of the younger age group. Specifically, age groupings were as follows: age 0-4, 70; age 4-7, 200; age 7-12, 180; age 12-20, 40; age 20-40, 15.

All were suffering from chronic nervous or mental disorders of a type requiring constant custodial care. Thirteen different diagnoses were represented as follows:

Diagnosis	Cases
Birth injuries	145
Prenatal maternal infection	12
Postnatal infection	115
Premature closure of cranial sutures	74
Hydrocephalus	44
Phenylketonuria	10
Kernicterus	65
Muscular dystrophy	3
Mongoloid	16
Gargoyle	4
Prenatal brain damage	6
Postnatal brain damage, traumatic	11
Total	505

In almost all cases, the patients were prone to chronic constipation. With few exceptions, they had required enemas on one or more previous occasions to secure evacuation. In the exceptions, daily administration of mineral oil had enabled a fair degree of bowel regularity. Patients for treatment were selected at random solely on the basis of need for evacuation.

Medication consisted of administration of either one or two 5 mg. enteric-coated tablets of bisacodyl or of one suppository of 10 mg.

Table 1.—Gross Results of Bisacodyl Administration

Dosage of Bisacodyl	Number of Patients	Resulting Bowel Movement		
		Gross	Moderate	None
Oral 5 mg. (one tablet)	95	41 (43.2%)	52 (54.7%)	2 (2.1%)
10 mg. (two tablets)	110	103 (93.6%)	7 (6.4%)	
Rectal 10 mg. (one suppository)	300	266 (88.7%)	34 (11.3%)	
Total	505	410 (81.2%)	93 (18.4%)	2 (0.4%)

Table 2.—Consistency of Stool as Related to Route of Administration

Route of Administration	Number of Patients	Consistency of Stool		
		Hard	Soft	Loose
Oral	205	4 (1.95%)	160 (78%)	41 (20%)
Rectal	300	15 (5%)	240 (80%)	45 (15%)

Table 3.—Response to Bisacodyl as a Function of Age and Dose

Bisacodyl Dosage and Patient Age Group	Number of Patients	Bowel Action		
		Gross	Moderate	None
5 mg. orally				
0 — 4 years	21	20	1	
4 — 7 "	35	17	18	
7 — 12 "	16	2	14	
12 — 20 "	16	1	14	1
20 + "	7	1	5	1
Total	95	41	52	2
10 mg. orally				
0 — 4 years				
4 — 7 "	36	36		
7 — 12 "	57	54	3	
12 — 20 "	11	8	3	
20 + "	6	5	1	
Total	110	103	7	
10 mg. suppository				
0 — 4 years	14	14		
4 — 7 "	53	52	1	
7 — 12 "	178	161	17	
12 — 20 "	35	28	7	
20 + "	20	11	9	
Total	300	266	34	

Results

The results of treatment are summarized in tables 1 to 3. Without distinction as to use of suppositories or tablets, a satisfactory (gross or moderate) evacuation was secured in all but two of the entire series of 505 patients. The two failures occurred in patients receiving only one 5 mg. tablet of the drug In patients receiving this dosage the resulting evacuation was also quantitatively smaller than in the group receiving two tablets. Similarly, the use of a single suppository, while effective in all instances, did not result in as large an evacuation as did two tablets administered by mouth. This finding suggests the advisability of a dosage of not less than two tablets in all adult cases in which the rectum and colon are suspected of being heavily loaded.

The movement resulting from bisacodyl administration was soft but formed in more than three fourths of those cases in which the oral tablets were administered (table 2). In only four cases was the stool uncomfortably hard. In 41 cases, or one fifth of the total, the stool tended to be loose. As far as stool consistency is concerned, the suppositories produced much the same result as the tablets with the exception that there was slightly less tendency to looseness. Comparing the results of bisacodyl suppositories with cleansing enemas, one gained a strong impression that the suppositories were equal or superior to enemas in their effectiveness and far less trouble to both nursing staff and patients.

Breakdown of response by dose and age (table 3) reveals clearly that above the age of seven years one tablet is distinctly less efficient than two in producing complete evacuation. It also appears to corroborate the finding that when the colon is heavily loaded, the administration of two tablets is also more effective than the suppository. Subject to adjustment of the dosage of the oral form to the age group, response appeared to be equally satisfactory regardless of age.

The expected time lag between administration and action is often of practical importance in prescribing laxatives. In these patients action occurred in from two to 11 hours after oral administration. In the majority it took place in from four to seven hours. In the patients receiving suppositories the time lag ranged from two to 65 minutes, the average being 30 to 45 minutes.

The action of bisacodyl appeared to be almost completely devoid of griping or tenesmus, and no systemic side actions of any kind were observed.

Commentary and Conclusions

In seeking a laxative for routine institutional use in cases such as are described in this report four major criteria were borne in mind. The chosen agent should be reliable as evidenced by a low failure rate; it should enable complete evacuation of the heavily loaded bowel as attested by the volume of the resulting bowel evacuation; it should be safe for patients of all ages as manifested by an absence or low incidence of side reactions; and, finally, it should preferably afford the convenience of effectiveness by either the oral or rectal route. The results obtained suggest that bisacodyl (Dulcolax) more closely approaches the ideal in these respects than any laxative previously employed. In general, the results have proved superior to those previously obtained in the same patients by enema administration. The saving of valuable nursing time achieved by eliminating this means of treatment in large numbers of cases is self evident and is lent added importance by the present critical shortage of nursing staff. This experience with bisacodyl which now covers a period of two years, leads to the belief that it is the agent of choice for routine institutional use.

Bisacodyl is supplied as Dulcolax by Geigy Pharmaceuticals, Ardsley, N. Y.

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Sunland Training Center.

Good and Bad Reconstructive Surgical Procedures in Paralytic Patients

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Much of the original work in reconstructive surgery for paralyzed patients was initiated at Georgia Warm Springs Foundation. The earliest surgery was conceived there by Dr. Michael Hoke, one of the pioneer orthopedic surgeons of the South. Dr. Hoke's efforts in reconstructive surgery were continued by Dr. C. E. Irwin and other younger surgeons for nearly three decades. Over 12,000 poliomyelitis patients have been evaluated, and the majority of these patients received multiple elective operative procedures. Many patients were subjected to surgery on 10 to 20 different occasions, one patient having been subjected to a total of 22 operative foot procedures. It will suffice to say that the only additional surgical procedure that appeared as a possible indication in this old patient when last examined was below-knee amputation.

During the past five years with the decline of acute poliomyelitis following the development of an effective vaccine by Salk, an attempt has been made to assess accurately the value of the many operative techniques performed at Warm Springs Foundation in the hope that this knowledge may be of help to patients suffering from types of paralysis other than poliomyelitis. Certain surgical procedures, for example, foot stabilization and tendon transplantations to reconstruct thumb and finger function of the hand, have continued to be consistently helpful procedures, whereas some other procedures, especially those designed to fuse or stiffen arm or shoulder joints, have often yielded equivocal results when judged by the patient and physicians other than the operating surgeon.

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Read before the Florida Orthopedic Society, Miami Beach, May 27, 1961.

In general, the principle of initially carrying out the simplest corrective type of procedure to improve or correct the deformity has been followed. If simple corrective measures, like passive exercise, splinting, and serial wedging with plaster casts, are unable to improve sufficiently or correct a deformity, then reconstructive surgery is considered if the percentile chance of success is reasonable.

As applied to postpoliomyelitis patients, musculoskeletal surgery should be considered as both preventive and corrective. Surgery can be preventive, for example, in performing many soft tissue procedures at the appropriate time in the course of the disease. Prophylactic tendon transplantations to provide motor balance to a foot may prevent subsequent severe deformity. In general, most postpoliomyelitis surgery is not performed within the two years following acute onset of the disease.

The timing of an operation in a paralyzed patient is often as important as the selection of the proper operative procedure. Some well conceived surgery, if performed at the wrong age, will yield consistently poor results, whereas, if performed at the appropriate age, will yield good results.

Foot Surgery

Foot surgery remains the most frequently performed type of surgery on paralytic patients. In reconstructive foot surgery the great needs are for foot balance and stabilization. A partially paralyzed foot can never be normal, but it usually can be made stable and well balanced. Case reviews of surgery in children reveal that foot surgery to balance potential muscle motors or available motors can effectively be carried out

during growth of the child, whereas surgery to stabilize a foot yields the best results if performed at a time of osseous maturity.

Foot stabilization surgery should also be timed to accompany lower extremity realinement surgery. It is a mistake to perform foot stabilization surgery during growth and then await osseous maturity to perform realinement surgery. In most instances, an unsatisfactory revision of the surgical foot stabilization will be necessary after extremity realinement is accomplished. Hence, it becomes obvious that one surgical error in timing or choice of procedure may subsequently necessitate multiple salvage procedures. The exacting need of foot surgery is accuracy of remodeling or sculpturing of bony architecture, for securing the best motor or muscle balance while judging foot balance in the light of over-all extremity function, and for gaining a consistently high proportion of technical surgical success combined with a consistently low proportion of associated complications.

Foot stabilization surgery has become one of our most dependable surgical efforts; triple arthrodesis of the Hoke or similar types has withstood the test of time. This does not mean, however, that all paralytic feet require stabilization surgery, nor is it inferred that this is a benign procedure without late complications.

The inference that a paralyzed foot requires stabilization on the basis of possible future degenerative joint disease is unwarranted. Our results agree with those of MacKenzie of England whose recent paper reveals that a triple arthrodesis of the Lambrinudi type may of itself predispose to degenerative ankle, or tarsometatarsal, joint derangements as well as ankle joint instability in a significant proportion of cases. Mackenzie stated "good" results were obtained in only 32 per cent of 100 cases when judged from one to 27 years later. Our experience with a larger group of cases indicates, also, that success is more likely if there is "balance of power between plantar and dorsiflexors."

Arthrodesis of the knee joint and of the hip joint in postpolio paralysis finds favor from some surgeons, but their findings are not consistent with our results.

Paralytic joints responding best to stabilization surgery are tarsal, ankle, and vertebral joints. In rare instances, scapulohumeral and radiocarpal arthrodesis is beneficial, but the indications for fusion in these locations are rare.

Realinement surgery in paralytic cases is usually performed in the long bones of the lower extremities to correct excessive deformity. The deformities most often requiring correction are excessive knee valgus, recurvatum or hyperextension, and external rotation of the lower leg. Oftimes, realinement osteotomy is necessary even though the extremity is essentially flail, since adequate bracing of the flail extremity may not be practical in the face of excessive deformity.

A recent review of 500 of our selected cases of tibial osteotomy revealed a few very significant findings. For example, there was an almost uniform failure of realinement surgery to remain satisfactory during years of growth, even though most of the patients were adequately braced following surgery.

Within an average time of two years postoperatively, the original deformity had recurred in nearly all instances unless an age level of 14 to 16 years in girls or 15 to 18 years in boys had been reached. In a high proportion of instances the deformity that was corrected by surgery recurred to a degree more severe than was noted at the time of original surgery. In our cases demonstrating the most severe degree of knock-knee deformity the patients had previously been subjected to one, two, or even three episodes of previous realinement surgery. Several patients received as many as four realinement osteotomies between the ages of six and 16, and in the average case the original malalinement deformity recurred after an average of two and one-half years.

Realinement surgery in paralytics is, as is well known, extensively practiced in cases of vertebral malalinements, especially in scoliosis. It is not the purpose of this paper to discuss the very complex and frustrating problems involved in the management of scoliosis.

One of the most difficult upper extremity problems still defying consistently satisfying surgical realinement technique is long-standing forearm supination contracture and deformity. This often represents a severe functional handicap. Radical soft tissue surgery is too often disappointing, and while osteotomy is probably the best present corrective technique, results often leave much to be desired. This deformity remains a fertile area for further surgical investigation.

Hand Surgery

As mentioned, surgical rehabilitation of the paralytic hand, with emphasis on the restoration of pinch, is most important. This involves an

exacting analysis of paralytic thumb and index finger deformities. As emphasized previously by Goldner and Irwin, the primary factor common to all paralytic hands under consideration is partial or complete loss of the function of true opposition as distinguished from "false opposition," or apposition. The thumb must pronate, abduct, and flex for opposition; and for good pinch, the index finger must do the same, that is, abduct, pronate, and flex. Special attention has been paid by many authors to reconstruction of the thumb to obtain this function. We believe, however, that the importance in carrying out, or reinforcing, the same actions of the index finger has not been correspondingly emphasized.

Goldner and Irwin were of the opinion that transplantation of the flexor digitorum sublimis of the ring finger to the proximal phalanx of the thumb is the most physiological method for fulfilling the principles established by Bunnell in cases of uncomplicated opponens weakness. Many prerequisites are necessary, however, for an excellent postoperative result, and their absence will cause the result to be unsatisfactory.

These prerequisites have been listed as: (1) a strong flexor pollicis longus; (2) a strong extensor pollicis longus and abductor pollicis longus; (3) a good or better flexor digitorum sublimis of one of the fingers, preferably the ring finger; (4) a good or better flexor carpi ulnaris for use as a dynamic pulley; (5) absence of bone, joint, or soft tissue deformity about the thumb; (6) good strength in the fingers, and a good palmar arch; and (7) adequate coordination with minimal tremor.

In general, these criteria are still followed by us in the reconstruction of a paralyzed thumb, and an over-all analysis of the results of this procedure reveals good functional results in 85 per cent of the cases in our large series. This high percentage of success was in marked contrast to deviations from this technique where a free tendon graft was employed to utilize, for example, the power of one of the extensor carpi radialis muscles prolonged around the ulnar border of the wrist to provide opposition, in which case the over-all "good results" are less than 30 per cent. Personal interviews with many of the patients classified as having "good results" in the 85 per cent group revealed, however, that the patients themselves were not enthusiastic about the surgery chiefly because the *contrast* between their preoperative substitution pattern and their good postoperative result was not as great as they desired. We found a marked discrepancy between the "good result" as judged by the surgeon and the results as judged by the patients themselves.

In this regard it is noteworthy that the patients subjected to "salvage surgery," in which a relatively simple operation to reroute the abductor pollicis longus around a pulley formed by the flexor carpi radialis or palmaris longus and a segment of the flexor retinaculum so that the line of pull of the abductor pollicis longus is parallel to the line of pull of the short abductor pollicis, resulted in a higher percentage of satisfied patients. In most cases this transposition or rerouting of the abductor pollicis longus is combined with reinforcement of the first dorsal interosseus tendon if the latter is weak. The extensor indicis proprius tendon is transplanted into the first dorsal interosseus tendon at a point distal to the metacarpophalangeal joint. This transplantation, if properly carried out, provides the rotary pronation of the index finger, as well as abduction and flexion at the metacarpophalangeal joint. If the extrinsic extensor to the index finger is of insufficient strength, it can often be reinforced by either the extensor carpi radialis longus or extensor carpi radialis brevis. These latter procedures, namely, rerouting of the abductor pollicis longus without section of the tendon and reinforcement of the first dorsal interosseus tendon as performed in many salvage-type cases, have resulted in the highest group of satisfied patients in our experience.

In the decade following World War II a wave of enthusiasm in younger orthopedic surgeons resulted in extensive experimental reconstructive hand surgery and a myriad of varied efforts at tendon transplantation about the hand. This is mentioned only as a point for condemnation. Most of these "experimental" efforts resulted in grotesque hands with less functional capacity following surgery than before, and, needless to say, a most unhappy group of patients. In general, the results of reconstructive hand surgery carried out in patients under 16 years of age were much poorer than those carried out in patients over 16 years of age. Results indicated that patients in the second and third decades showed the best results from reconstructive hand surgery, other factors being equal.

As an anatomic unit, and when viewed in the light of the entire functional extremity, the paralytic hand, when carefully analyzed, offers the greatest potential for useful reconstructive surgery. In the salvage-type hand of extreme paralysis,

only two fingers require concentrated attention and effort; these are, of course, the thumb and the index finger.

Summary

Following motor paralysis there is a definite need for comprehensive surgical planning from the date of onset of paralysis through the years ahead. This need for comprehensive surgical planning is especially true in children in whom the original surgical planning should at least extend from the onset of paralysis through maturity.

In addition, there is great need for uniform and consistent surgical guidance. The best over-all results from surgery in paralytics are seen in those cases followed many years by a single surgeon, whereas many of the poorest results are seen in those patients who tend to "shop about" from one medical center to another.

Surgical results in paralytics are usually directly proportional to the strength of the indication for the surgery.

In paralytic patients, the surgeon works with minimums. Ofttimes so much is done and so much is sacrificed to gain so little, but if the gain is real, the patient is happy.

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Community Approach to the Mentally Retarded Child

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First, it is necessary to define what is meant by "mentally retarded child." Technically, this is any child with an intelligence quotient of 70 or less. It is obvious that all children with this quotient or below do not present the same problem. The hyperactive physically normal child with an intelligence quotient of 70 offers to the community an entirely different problem from the "typical" mongoloid child with an intelligence quotient of 50. The first grows at a normal rate, yet even as a young child can become a problem because of his volatile nature with sudden temper outbursts and lack of inhibition; at 10 to 12 years of age, this child can, for the same reason, become a real threat to those around him. On the contrary, the mongoloid child generally grows slowly and is usually physically small in size, making him appear much more commensurate with his mental age. Remember, one judges a child by his apparent physical age rather than by his mental or developmental age. Thus the community is far more likely to accept a mongoloid child than the physically normal but hyperactive retarded child.

When you add to these two examples the children who fall in the severely retarded and physically normal group, the severely retarded and physically retarded group, and the physically handicapped group with mental retardation, you can see that this problem cannot be approached by a single program for all groups, but must be a multifaceted program that recognizes all groups.

Not uncommonly, the various personnel of the public health agencies are likely to be the first persons and often most consistently the ones with whom the families of these children have contact. This is especially true of the public health nurse. She is frequently resorted to as a source of information, guidance, and assistance.

The most important thing that any medical or paramedical personnel can do for the parents of

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these children is to be a sympathetic listener and friend. In working with parents of mentally retarded children probably the most frequent single complaint one hears is, "No one will tell me anything." First, one must remember that they are desperately seeking for someone to tell them what they want to hear. In reality, they may have been told many times, but since it was not what they wanted to hear, it did not register. Another problem is that mental retardation has numerous causes of which many are obscure. When one tries to explain such a condition to a family of limited educational background, the problems he encounters are obvious. If the family then seeks help from another source, as is frequently the case, that person usually will explain the same problem in an entirely different way so that the parents are confused and will state that the two doctors told them different things, which in reality is not true. This brings out the point which I think is especially important, and that is that the fewer the persons these families deal with the less likely they are to be confused. It also brings out the importance of trying to keep everyone who is working with the child informed as to what the other person is doing and saying.

A good example happens to be a child in my practice. This child is three or four years old, is moderately retarded but almost physically normal, and is the child of upper middle-aged parents with good educational and cultural background. I had not seen this child in my office for 12 to 18 months, but the last time I had talked with the parents, they had been aware of the possibility of placement in an institution, although they were not actively considering it. In the meantime, the child was being seen in the nursery group of our cerebral palsy unit to try to assess his capabilities and his probability of adjustment. The social worker there had spent much time with the mother, and it had been mutually agreed that admission to an institution was probably necessary. About this time, the mother came into my office with one of her other children who was sick and brought along the retarded child. She casually asked what I thought about the retarded child and about placement. Since I had not seen the child in some time and since I was not aware of her lengthy conferences with the social worker, I told her I thought I would like to observe the child awhile to see how bad he was before deciding about placement. She said little more and left. I later discussed the matter with the social worker, and she stated that the mother had gotten the impression that I was against placement, which certainly was not the case. This incident vividly points up two important points in dealing with the parents: (1) the necessity for good communication between all personnel taking care of such a child, and (2) the ease with which parents can misinterpret what is said.

Six Point Program

The ideal community program should provide facilities for the various types of patients I have mentioned in the following manner:

1. Home care by parents whenever possible for the minimally involved child and for the child who is no problem in the home.
2. Day care centers for the more seriously involved children for parents who work, to provide part time care to relieve mothers of the continuously confining nature of the care of these children.
3. Training programs for the trainable child.
4. Occupational therapy and physical therapy centers for cerebral palsy patients and others.
5. Special ungraded classes in school for the mentally slow child.
6. Permanent custodial care centers.

To achieve the objective stated for the community program, everyone must realize that each involved child has to be individually considered in order to place him in the proper slot in the program. Also, it must be realized that the program outlined is the ideal one that frequently can be met in its entirety only by the large community, though it can be modified to fit smaller communities.

The first part of the program mentioned is home care. This must be the basis of all programs. In working with the Crippled Children's program with the Florida Crippled Children's Commission, I have seen patients referred for evaluation for possible admission to Sunland Training Center when they were not creating any problem at home, no undue stresses were being placed on them to perform above their limit, and the parents were happy to have them at home, but pressure was being placed on the family to have them admitted merely because they were retarded. This is socially and financially unsound. There well may come a time when a child cannot be cared for at home, but that is the time to admit him. I admit readily, however, that were this same child in another family

or in another home situation, it would be highly desirous to admit the child to a permanent custodial institution at a very early age.

The second part of this program would provide day care centers. These need not be elaborate. There are many families who have children so mentally and/or physically retarded that they are bedridden. These children constitute a real family problem. In families of borderline income, the mothers cannot work because there is no one to care for the child. Caring for these children 24 hours a day, seven days a week, can absorb all the mother's time and interest to the detriment of the rest of the family because of them. Frequently, the community is given many other problems to handle such as normal but emotionally unstable children, broken homes, and the like. If these nonworking mothers could leave such children for two to eight hours at nominal cost, it would be excellent preventive mental health. Ideally, such day care centers would also have facilities for the physically normal but hyperactive child, to serve the same purpose.

These day care centers need not necessarily be tax-supported agencies, but could be subsidized or sponsored, beyond the families' ability to pay, by such groups as churches, men's and women's service clubs, the Junior League, or possibly a combination of these groups. Churches are especially suited for this type of project because they usually have the physical plant, plus available volunteers to help staff it.

The third part of the program is more ambitious and expensive and consists of providing manual training for the trainable but noneducable group. The success of this program rests almost entirely on establishing realistic goals for the program and properly screening the children so that only the ones who can benefit are enrolled. Such a program should include teaching girls simple domestic skills and those skills that require little imagination but frequent repetition. The boys can be taught similar activities. The goal should be to make the child self sufficient under a home or closely sheltered environment.

The fourth part of the program, providing occupational and physical therapy centers, is even more costly and again will be available only in larger communities. It should be rigorously controlled to reach stated objectives and not just provide therapy for the sake of therapy. A child might logically be enrolled in part two of the program, then switched to part four for several months, then back to part two.

The fifth part of the program, special ungraded classes, has already been put into effect by the State Department of Education in some counties and should be extended to all. To have a mentally slow child in the same class with normal children is unfair to both.

The sixth part of the program, the permanent custodial care center, is already in effect in Gainesville, Orlando, and Lee County. These facilities are being taxed to their utmost already, but I dare say that if the complete program as outlined were successfully implemented it would reduce the need for such institutions to expand at the present rate. At this time, there are 3,461 patients in Gainesville, 363 patients in Orlando and 279 patients in Lee County. In the past 10 years, 363 patients have been discharged from these institutions to resume a place in society; so one can see what this forebodes in the years to come. The present per diem cost of care at these institutions is about $8.

Many may feel this is a disjointed program, which to some extent it is. One of the problems faced by any community in which one or more parts of this program are in effect is the lack of coordination between the parts. Also, with the development of many lay-controlled health organizations, there is no unifying influence between them. Each little group wants its autonomy, which it may need in order to be financially self sufficient, but still the important consideration is that the medical community be made fully aware of all aspects of such programs in existence. If one takes the very broad concept of the Public Health Officer as one who furthers the better health of the community, then logically he should accept the role as coordinator of the various programs. This does not mean that each voluntary agency would have to sacrifice any of its autonomy, but it does mean that at least there could be some meeting ground between agencies. This could logically be the function of the Public Health Officers and their staffs.

By serving as ex-officio members of the boards of the various health agencies and by staying in close contact with the various other organizations involved, the Public Health Officer could be a major factor in reducing waste and duplication. He thus could improve the care of the mentally retarded child and assist in mobilizing concerted action to help improve this problem.

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President's Page

What One Man Can Do

How often does your blood begin to simmer when watching a "cute" TV comic lambaste the medical profession, or upon reading about how doctors have become so callous and mercenary that they refuse to attend patients who cannot pay, or on hearing weird stories about how some poor creature suffered untold misery because of a doctor's disinterest? And how often have you wondered just what place some politician was talking about when he described the desperate inadequacy of existent medical care? Have you ever felt frustrated and outraged that such a picture of a noble profession should be painted—and repainted—without being challenged and without having the true facts of the matter presented? Have you ever wished that you had the ability to tell the story of the miracle of modern medicine, to let people really know how fortunate they are to be living in an age when definitive rather than remedial medicine is being practiced and in a country where the medical profession holds the highest regard for the worth of the individual, irrespective of who he may be? I have. And I am sure most doctors have felt the same way. But then I resign myself with the feeling, "Well, what can *I* do? What can any one man do?"

These past two years have shown us what one man can do. Our own Dr. Edward R. Annis has practically given up his practice to tell our story in a manner that each of us has so often wished that he himself could tell. He has become the most articulate, and best known medical spokesman in America. "Mr. American Doctor," as it were. Last month we had the gratifying experience of seeing him elected President-Elect of the American Medical Association, the first time in over 40 years that a doctor who had never held an office of any sort in the American Medical Association has been directly elected to its highest office. Ed has become more than an individual; he is a symbol of resurgent interest of the doctor in the American Medical Association and in public affairs. He has become the symbol to the public of the intelligent, dedicated doctor who recognizes his obligation not only to his patients but to the community and to society. Ed has been an inspiration to all of us, and we delight in his honors. It is my fervent hope that doctors, generally, rather than getting a vicarious satisfaction from Ed's work, will take up the cudgel in behalf of our cause. Ed has shown us what one doctor can do. Imagine what 265,000 doctors could do.

Robert E. Gellner



Significance of Blood Volume Studies in Surgical Patients

The value of blood volume studies in transfusion therapy is not generally appreciated. The indications, interpretation and utilization are replete with pitfalls which can be easily avoided on thoughtful consideration.

Blood volume studies have no place in the evaluation or treatment of shock due to hemorrhage, or of anemia due to any cause. In massive hemorrhage the need is immediate and obvious. In shock the increased capillary permeability permits the loss of dye or tagged albumen, and an erroneous estimate of blood loss will result. Spontaneous replacement from tissue fluids begins early and in the absence of continuing bleeding it may be complete in 48 hours. In uncomplicated anemia even when severe, the blood volume may be normal. This should be remembered in preventing an overload reaction by use of whole blood rather than cell suspension alone for transfusion in patients with this type of anemia.

The acute or chronically ill, protein-depleted patient, on the other hand, presents the greatest opportunity to put this important test to work. The blood volume may be greatly diminished and urgent surgery may be quite hazardous. Accurate quantitative replacement of both cell mass and plasma volume or preferably the total circulating plasma protein is essential. One must know the physiologic mechanism of this deficit for its proper interpretation and correct manner of replacement.

A protein-depleted patient who is well hydrated and has adequate electrolytes or a high blood sodium may have a normal or even a high plasma volume. On the other hand, if he is dehydrated and there is a low serum sodium, the plasma volume may be very low. Depleted fluids, electrolytes and serum protein of course produce the lowest blood volumes. The so-called percentage blood studies then become quite meaningless, as the dehydrated, protein-depleted hypovolemic patient with advanced carcinoma is admitted for surgery and his red blood cell count and hematocrit and hemoglobin levels are all reported to be near normal.

Quantitative replacement of both components, cells and plasma, is only possible by first determining the accurate deficit of each. Such specific therapy may prevent serious shock during surgery when the compensatory mechanism, vasomotor tonus, is released by anesthesia, and a relatively small amount of blood is lost.

It must be remembered, however, that protein disequilibrium has been created between the serum and tissue proteins by transfusion of these patients, and the plasma protein which has been added by transfusion will soon be lost as it seeks its normal volume relationship of 1:30 with tissue protein; and with this shift the plasma volume recedes postoperatively. Ileus, anuria, or circulatory failure may result. Repeated transfusions should be planned postoperatively in the severely malnourished or in those with great protein losses.

This is truly a nutritional problem, and when practical, a period of intensive nutritional management should be instituted in order to stabilize the blood volume by replacing tissue as well as plasma proteins.

Technical errors in blood volume studies are far less frequent than are clinical errors in interpretation of the results. The most common error is in the determination of the standard volume for the patient. Remember to estimate normal on the basis of pre-illness weight and not on the hospital admission weight. Use standard weight tables if necessary because of questionable obesity. A 30 pound loss in weight during an illness, if not considered in the estimate, would permit a 1,000 cc. replacement error.

Blood volume studies are no longer academic. They are extremely helpful to the thoughtful surgeon in providing a greater margin of safety for the seriously ill, protein-depleted patient. An

isotope laboratory is not necessary as the Evans blue (T-1827) dye method is very satisfactory. The physiologic principles are really very simple, but proper application and evaluation are necessary.

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The Laxative Problem

This issue of The Journal presents an article entitled, "The Clinical Effects of Bisacodyl as a Laxative for Mentally Defective Patients." In this article the author develops particularly and effectively the apparent advantages of a relatively new cathartic for use in the management of bowel function in mentally deficient patients. At the same time, he adds to a rapidly growing list of testimonials to the effectiveness of bisacodyl (Dulcolax) as a "colonic evacuant," and to its particular adaptability to "routine use" in institutional problems in constipation.

Physicians with experience in the care of low grade mentally defective patients and the problems of bedridden geriatric patients are well aware of the need for a method of bowel control more satisfactory than the cleansing enema, with its attendant problems of time, personnel, equipment and general "mess." The results of this clinical but uncontrolled trial are entirely similar to those of several other, albeit equally uncontrolled, experiments listed in the bibliography, and without doubt recommend bisacodyl at least for trial under similar circumstances.

However effective and valuable this preparation may prove to be when used under the circumstances for which it is recommended, there is little to sanction the apparent recommendation for general use as a treatment for functional constipation, noted in most of the papers listed in the bibliography. These papers present results of essentially uncontrolled tests, and little information is obtainable which compares the effectiveness of bisacodyl with that of long-known, time-proved, but generally inadvertently used cascara, aloe, phenolphthalein and the newer anthraquinones. For example, very few of these articles concerned with the use of the bisacodyl rectal suppositories presented observations on effectively controlled tests, and none of the tests concerned with the oral use of the drug were controlled. In fact, the best controlled work with the use of bisacodyl suppositories was reported to show a "statistically significant" advantage of bisacodyl over glycerin suppositories in a series of 41 patients. It is also notable that throughout the various studies one finds the usual variation in the results of the use of any cathartic, namely abdominal cramping, loose stools and occasional failure.

No mention is made in any of the publications reviewed of the comparative costs involved—an item of considerable importance to most institutions. The cost differential of Dulcolax as compared to the other preparations mentioned is something of the order of eight or 10 to one.

These remarks are not meant in any way to detract from the value of the extensive and painstaking observations of the essayist made in his search for a solution to a formidable problem in institutional care. Without a doubt bisacodyl is an effective and nondrastic cathartic which may well go a long way in alleviating a major problem in the care of institutional patients. It seems that the suppository is a useful, convenient, and reasonably predictable (if expensive) means of relieving the rectal type of constipation innate in this type of patient. As always, time will tell.

Donald P. White Jr., M.D.
Jacksonville

Reconstructive Surgery in Paralytic Patients

In his paper in this issue of The Journal on "Good and Bad Reconstructive Surgical Procedures in Paralytic Patients," Dr. Paul L. Reith analyzes results from a vast amount of clinical material. His utilization of the simplest procedures is sound. The fewer the variables, the fewer the chances of a less than anticipated result. Physiotherapy and the prevention of contractures and deformities are the treatment for the first two years of the paralytic limb. If surgery is indicated after that time on a part of the body, the next decision is when to perform it. Surgical procedures that will require immobilization of growth lines for long periods of time will frequently damage the growth of an already compromised epiphysis. Do not perform surgery on the very

young if it can wait and be better performed when they are older.

Soft tissue work by tendon transplants about the foot in the absence of a stable tarsus is not ideal, but is probably better than letting bony deformities occur. A triple arthrodesis can be done later with better material.

Surgery planned to be followed by more surgery later in the same area and to be performed during the growing years is not usually productive of good results, as Dr. Reith has found. Do it once when it is ready and that should be all. Markedly asymmetrical epiphyseal growth, however, probably is an exception to this rule as seen in traumatic cases.

Dr. Reith has found that foot stabilization by the triple arthrodesis is the best reconstructive operation, but it must be clearly indicated. Any stabilized joint throws an added load on the other movable joints on either side of it so that they wear out more quickly than they would otherwise.

Dr. Reith's comments on the mobilization and utilization of the thumb and index finger are timely and need no further comment.

In brief, I cannot disagree in any way with the findings and analysis Dr. Reith presents. I enjoyed his discussion of the measures that work and the downgrading of the experiments that have failed.

George T. F. Rahilly, M.D.
Fort Lauderdale

The Use of Orthoptics in the Treatment of Strabismus

Ocular deviations have a most powerful effect on the emotional and mental development of a child. The binocular use of the two eyes may be greatly aided with orthoptic training if the child is seen at an early age.

An orthoptic department serves two main purposes. First, it serves as a diagnostic center where, in quieter surroundings than the office of a busy ophthalmologist, a child's deviation may be assessed in three ways: (1) the deviation is investigated, its type noted and its behavior observed at different times and under various circumstances; (2) attempts are made to discover the primary obstacle causing the strabismus; and (3) the state of fusional ability is investigated and also whether secondary correspondence, or improper reflex arcs, have already developed.

It is these reflex nerve arcs, or retinal correspondence, that make an early study of cross-eyed children necessary. In infancy and early childhood these binocular reflexes are developing and are usually fixed by the age of five years. If there has been an obstacle along the reflex arc which prevents normal development, abnormal perversions of the reflex will develop and will become fixed by the age of five and usually completely unchangeable by the age of eight. It is therefore thought best to see the child in the first or second year of life, or as soon as a deviation of an eye is noticed.

When the ophthalmologist has evaluated these findings, he then decides on a course of therapy. If there is sufficient refractive error, glasses will be prescribed. If suppression amblyopia is present, occlusion is started, and if the deviation is so great that binocular vision at any distance may be impossible, early surgical measures will be contemplated.

When the child is old enough mentally and emotionally, and this age has little to do with his chronological age, he will be sent back to the orthoptic center for treatment. It is in this second aspect of orthoptics that most of the misconceptions have arisen.

By orthoptic treatment is meant the re-education of the child's binocular reflexes, the expansion of those already present and the elimination of any secondary abnormal reflexes which may have developed. As mentioned, there is a definite time factor involved, and the earlier treatment is started the better the end result will be.

An orthoptic center is a useful adjunct to an ophthalmologist, but there must be close cooperation between the ophthalmologist, the orthoptist, the child, and the child's parents. All must work together in harmony, or the end result will be in doubt.

Thomas S. Edwards, M.D., Director
Orthoptic Center, Baptist Memorial Hospital
Jacksonville

Esme R. Albrecht, BSC., DBO,
Orthoptist
Baptist Memorial Hospital





(Left) Dr. Annis accepts nomination.
(Above) Dr. Annis and Dr. Eustace A. Allen, Atlanta, Vice-President, American Medical Association.

Dr. Edward Roland Annis, President-Elect of the American Medical Association

Florida's own Dr. Edward R. Annis, prominent Miami surgeon, was chosen president-elect of the American Medical Association at its June meeting in Chicago. Dr. Annis, chairman of the AMA's National Speakers Bureau last year, will serve as president-elect until June 1963 when he will become the 117th president of the 189,000 member association. He is the second member of the Florida Medical Association ever to be elected to Medicine's highest office and becomes the first president-elect chosen by the association in more than 40 years who had not previously served either in the House of Delegates or on the Board of Trustees or councils or committees of the association.

Representing the medical profession in the AMA's campaign against the King-Anderson Bill, Dr. Annis has won national fame as a speaker and debater. He has filled a strenuous schedule of speaking engagements throughout the country and has appeared in nationally televised debates against such public figures as Walter Reuther, president of the United Auto Workers, and Senators Humphrey of Minnesota, Javits of New York, Proxmire of Wisconsin and McNamara of Michigan. Last May, he also presented Medicine's position on the King-Anderson controversy on the AMA's national television program, "Your Doctor Reports."

Dr. Annis received his early schooling and academic training in Detroit, where he was born on March 27, 1913. As a student, he won many debating honors and in his senior year at the University of Detroit he won the university oratorical

championship. Inspired by his family physician, he decided at the age of six to become a doctor and in 1938 won his medical degree from Marquette University School of Medicine in Milwaukee, Wis. For the first eight years of his professional career he practiced in Tallahassee. Since 1946 he has engaged in the practice of surgery in Miami, where for 10 years he has been chief of the Department of General Surgery at Mercy Hospital.

Throughout his career, Dr. Annis has been extremely active in civic as well as professional affairs in Florida, proving in practice his conviction that no matter how busy a doctor may be in his own profession, he should find time for participation in civic affairs. The offices he has filled and the service he has rendered make an impressive record both within and without the profession. Ever the advocate of free enterprise and individual initiative, he has also served effectively across the years in the political arena at local, state and national levels. In 1959, he was selected by Governor Collins to head the Florida Citizens Medical Committee on Health, which brought in sweeping recommendations for better and wider services for the indigent. At the present time he is chairman of the Committee on State Legislation of the Florida Medical Association. An active member of the Dade County Chamber of Commerce, he serves on its political action committee and for several years he has served as a director of the Family Service Bureau and of the senior citizens division of the Welfare Planning Council of Miami.

A Kiwanian and a member of the Roman Catholic Church and of the Knights of Columbus, this versatile and accomplished physician turns for recreation to horseback riding, swimming, bicycling and tennis. With a gift for excelling in whatever he undertakes, he recently won a tennis tournament at the local Bath Club.

Dr. Annis and his wife, the former Betty McCue Starck, live at Baypoint, Miami. They have eight children, four boys and four girls ranging in age from three to 19 years.

The Florida Medical Association takes great pride and pleasure in the selection of Dr. Annis for the high honor that has been accorded him and is deeply indebted to him for bringing this honor to the Association and the state. In the light of this reflected glory, let us, one and all, give him solid support during his administration.



Association News

American Medical Association 111th Annual Meeting Report of Delegates

The choice of Dr. Edward R. Annis of Miami as president-elect of the American Medical Association climaxed for Florida physicians the 111th Annual Meeting of the Association, held in Chicago on June 24-28, 1961. Acting on behalf of the Delegates of the Florida Medical Association, Dr. Homer L. Pearson Jr., of Miami, a member of the AMA Board of Trustees, nominated Dr. Annis for the post in response to a demand that approached the proportions of a nationwide draft, and his election is a source of great gratification and pride to the Delegates and to the officers and members of the Florida Medical Association. As chairman of the AMA National Speakers Bureau and spokesman in the campaign against the King-Anderson Bill, Dr. Annis has become a national figure of renown whose brilliant service in the cause of American Medicine at this crucial time qualifies him well for this high honor.

At the opening session of the House of Delegates, Dr. Leonard W. Larson, retiring president, commented on the Association's fight against the King-Anderson Bill, "This great struggle has been testing again whether the science and art of medicine will be permitted to grow and flourish in freedom, or whether progress in medicine will be stunted and shriveled by the excesses of government control." In his inaugural address, Dr. George M. Fister of Ogden, Utah, incoming president, declared, "We will not compromise with those who regard medical care problems as simply playthings in the game of politics—gimmicks to attract the votes of the gullible." He promised no letup during the next year "in our campaign to preserve the high standards of our voluntary, free choice, medical care system" and he added, "We will cooperate, to our very utmost, with government officials, legislators and all Americans who are sincerely interested in finding sound, practical solutions to medical care problems—solutions which include both a respect for medical standards and a respect for the taxpayers."

Among the major subjects acted upon by the House were health care for the aged, medical discipline, com-

position of the AMA Board of Trustees, a study of the American Board of Abdominal Surgery, relations with the American College of Surgeons, and voluntary health insurance.

Health Care for the Aged.—The House received 17 resolutions expressing full support of the Kerr-Mills program and firm opposition to the King-Anderson type of legislation. It reaffirmed its active opposition to the King-Anderson Bill for the following reasons: (1) there is no need for such a plan; (2) it would provide inadequate care for all aged rather than complete care for those who need help; (3) inherent in the use of the Social Security mechanism are governmental controls of medical practice which would increase with the expansion of the program; and (4) it would mean deterioration of the quality of medical care not only for the aged but for the population as a whole. In reaffirming strong support for the Kerr-Mills Act, the House declared that "the Kerr-Mills method should be given a fair and reasonable chance to meet the need and thus remove the demand for further Federal legislation." It urged that in states where existing programs indicate a need for a Kerr-Mills implementing law, each state association should actively sponsor and promote with other responsible citizens the enactment of such a law.

Medical Discipline.—To implement a major recommendation made by the Medical Disciplinary Committee at the June 1961 meeting in New York, the House approved a change in the Bylaws under which a proposed Section 1 (B) of Chapter IV will now read:

"In addition to such disciplinary action as may be taken under the constitution and bylaws of the component society and constituent association to which the Member belongs, or when a state medical association to which a Member belongs requests the AMA to take disciplinary action, or when at the request of the American Medical Association the state association to which the member belongs consents to disciplinary proceedings by AMA, the Judicial Council, after due notice and hearing, may censure him, or may suspend or expel any member of the American Medical Association from AMA membership only for an infraction of the Constitution or these Bylaws or for a violation of the Principles of Medical Ethics."

Board of Trustees.—The House also approved increasing the size of the AMA Board of Trustees from 11 to 15 members by adding three elected members and including the immediate past president of the Association for a one year term. In addition, it accepted a committee recommendation that set the term of office for elected Board members at three years and limited the number of terms to three, for a maximum total of nine years service.

American Board of Abdominal Surgery.—The House approved a report recommending that recognition should not be granted to the American Board of Abdominal Surgery as a specialty board. It declared its disapproval in principle of establishing specialties which are based largely or wholly on an arbitrarily defined anatomical region of the body.

American College of Surgeons.—In considering a report and four resolutions involving surgical assistants and relations between the AMA and the American College of Surgeons, the House declared that the adoption and interpretation of the Principles of Medical Ethics are the prerogative and duty of the American Medical Association. It also restated the Association's June 1961 policy statement in this regard.

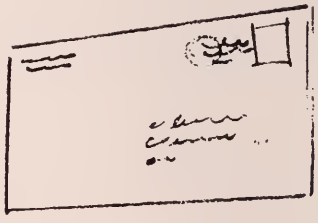
Voluntary Health Insurance.—A policy statement pertaining to the utilization of state and federal tax funds to provide voluntary prepayment insurance protection to assist the aged in meeting the costs of health care services was approved by the House. It recognized the prepayment or insurance principle as applicable to all ages, advocated prepayment of their own expenses by persons able to do so and assistance for those unable to prepay adequately their expenses "to the degree necessary by their families, their communities, their states, and if these fail, by the Federal Government—but only in conjunction with other levels of government," and declared the prepayment system should be devoid of governmental controls, should uphold the dignity of the individual and should offer protection reasonably comprehensive rather than token in character.

Miscellaneous Actions.—The House was informed that the Board of Trustees had instructed the Council on Drugs to conduct a study on the relationship between tobacco and disease. It adopted an AMA Statement of Principles on Mental Health and urged support for the First National Congress for Mental Illness and Health, to be held in Chicago in October. Among numerous other actions, it approved a Guide to the Organization and Operation of Airport Medical Services, urged automobile controls, should uphold the dignity of the individual and all automobiles, recommended a study of specialty residencies, and reaffirmed its opposition to compulsory coverage of physicians under the Social Security Act. With the approval of the House, annual meetings were scheduled for Chicago in 1966, Atlantic City in 1967, and San Francisco in 1968, and clinical meetings for Philadelphia in 1965, and Las Vegas in 1966.

Physicians in attendance at the meeting numbered 14,092. Final registration figures reached a total of 42,643.

Respectfully submitted,
Reuben B. Chrisman Jr., M.D., Chairman
Jere W. Annis, M.D.
Burns A. Dobbins Jr., M.D.
Francis T. Holland, M.D.
Meredith Mallory, M.D.

Letters



June 13, 1962

Dear Dr. Moseley:

Having just read the editorial comments in the current issue of The Journal by my colleague, Dr. John S. Stewart, on my article "Cesium 137 Supervoltage Therapy," I feel that in fairness to your readers a prompt reply is indicated. Even this short delay in my reply is due to my efforts to verify some of the physical facts stated. It is my feeling that Dr. Stewart's information is based on machine design which is already obsolete or on the papers of authors of whom I am ignorant. Before I begin this rebuttal, let me say that at no time did I intimate that Cesium 137, Cobalt 60 and multimillion volt roentgen ray generators were identical.

As practicing clinicians, we must depend on the data of our physicists. It is a known fact that the gamma efflux of Cesium 137 is lower than that of Cobalt 60. This disadvantage is overcome by increasing the size of the loadings. With a loading of 2000 curies, the output from a

Cesium 137 head at 50 cm. with a 10 x 10 cm. cone is 40.1 r per minute (from a recent calibration). If the distance from the source to the skin were to be reduced to 18 to 22 cm. as Dr. Stewart suggests, by the inverse square law the output would be increased almost ninefold or close to 350 r per minute. This certainly is a dangerously fast output.

The next point I wish to take up is the matter of depth dose. The depth dose of Cesium 137 at 10 cm. using a 10 x 10 cm. cone is slightly over 44% (from the isodose chart prepared by the Picker Research Center). The depth dose for Cobalt 60 at 10 cm. using the same cone is 49%. I was not discussing 80 or 100 cm. depth doses since these are not conventionally used. I therefore maintain that my statement that these depth doses were close is correct. I am afraid that Dr. Stewart's information was based on a paper from the M. D. Anderson Hospital and Tumor Clinic published in Radiology in May 1960 which had a source of 800 curies of Cesium 137 and an exposure dose rate of 3.62 r per minute at one meter. This would correspond to a dose rate of 14.48 r per minute at 50 cm. Compare this with the above dose rate of 40.1 r per minute.

May I now get onto more practical grounds? A little more than one year ago I obtained a list of all the users of the Picker Cesium 137 unit. There were only four. Since Atomic Energy of Canada, Ltd., is the only other major producer of this type of equipment, I will assume that there are about eight or ten users in the entire country. Excerpts from these users follow. The original letters are on file.

Dr. A. E. Imler of the Lloyd Noland Hospital, Fairfield, Ala., wrote on May 31, 1961:

"We have been using a Cesium Unit at this institution for the past one and one-half years and we are extremely pleased with the results we have obtained thus far. From a practical point of view, the relative depth dose of Cesium as compared with Cobalt is comparable. The skin-sparing effect of Cesium is excellent and comparable with Cobalt.

"We have been able to safely deliver mid-pelvic doses of 4500 to 5200 gamma r in treating carcinoma of the cervix and have had no significant bladder or intestinal complications. The incidences of proctitis and cystitis have been extremely low: as a matter of fact, they have been less than we formerly had with the standard conventional 250 KV therapy machine."

Dr. J. L. Fisher from St. Joseph, Mo., wrote on April 13, 1961:

"We have been using a Picker Radioactive Cesium Unit since December 1959 and we are very happy with it. The unit is easily adapted to various techniques. Considerably less time is required between patients in the positioning than required with Cobalt. As you know, the depth dose isodose curves with Cesium at 50 cm. are comparable to those of Cobalt.

"From the economical standpoint, I feel Cesium is a great deal more practical for the private practitioner than Cobalt. The skin-sparing effect is approximately that of Cobalt and the bone absorption is very similar. We are very grateful that we have this installation."

Dr. Irvin F. Hummon, Director of the Department of Radiology of the Cook County Hospital of Chicago, wrote on April 7, 1961:

"We have had our Picker cesium unit for a year and have liked it quite well. The unit itself has worked without trouble and the results that we have obtained with it are quite satisfactory.

"The therapeutic results with the cesium unit are the same regardless of the amount of cesium contained in the head; the only difference being in the time of individual treatments. I would think one would wish to have a source with an output of at least 10 r per minute at one meter or 600 rhm. This will give you 40 r per minute at 50 cm. which is a good workable output. One gets slightly more skin effect than is true with Cobalt; however, the actual depth doses are quite comparable."

I regret to say that the fourth user, Dr. Enoch Callaway, Director of the Cancer Clinic of the City-County Hospital of LaGrange, Ga., has since passed away. His Cesium 137 unit served all the cancer needs of his county. During a personally conducted tour of his clinic he stated that his unit ideally served the needs of his small county and that his results in every way were excellent.

Dr. Manuel Lederman, one of the leading radiotherapists of England and an invited speaker at the Symposium on Radiotherapy at the University of Minnesota, had this to say on October 31, 1960:

"Now you can use either x-rays, gamma rays or you can use electrons. You can use anything but 200 KV, which was always an abomination. It never did any good insofar as I can see, unless you were a genius. Now there is, I believe very strongly, an optimum energy range, if you like, for human cancer. And that voltage range lies

between one and five million volts. I don't believe in this day and age one should leave it to machinery below one million volts."

Since Dr. Stewart objects to my statement that there has been a sharp curtailment of production of roentgen ray generators, a reply from one of the leading manufacturers of such equipment received June 13, 1962 states that "We have curtailed the manufacture of our 260 KV therapy machine. . . . A great majority of our therapy equipment has become of isotope type."

The final point Dr. Stewart makes is that Cesium 137 is not comparable to Cobalt 60 or multimillion volt roentgen ray generators and that it is doubtful whether teleotherapy has actually cured any more cases of neoplasm than conventional 250-300 KV roentgen ray generators. By default he admits that the money and effort spent on these Gargantuan machines is wasted. I am, however, sorry that he, as a Radiologist, does not have sufficient confidence in radiation therapy to believe that it is curable without mutilation in many types of neoplasm or that palliation can be obtained from Cesium 137 over a wide range of depths. For the small hospital or for the radiotherapist in the dwindling field of private practice, this type of equipment should be ideal.

Very truly yours,
J. C. Weisman, M.D.
Orlando

News

Dr. Courtlandt D. Berry of Orlando will serve as fraternal delegate from the Florida Medical Association to the annual meeting of the Medical Association of Puerto Rico being held in San Juan on November 13-17.

The annual course in postgraduate gastroenterology of the American College of Gastroenterology will be presented at the Morrison Hotel in Chicago on November 1-3, according to announcement by Dr. Edward I. Melich of Treasure Island, governor for the College in Florida.

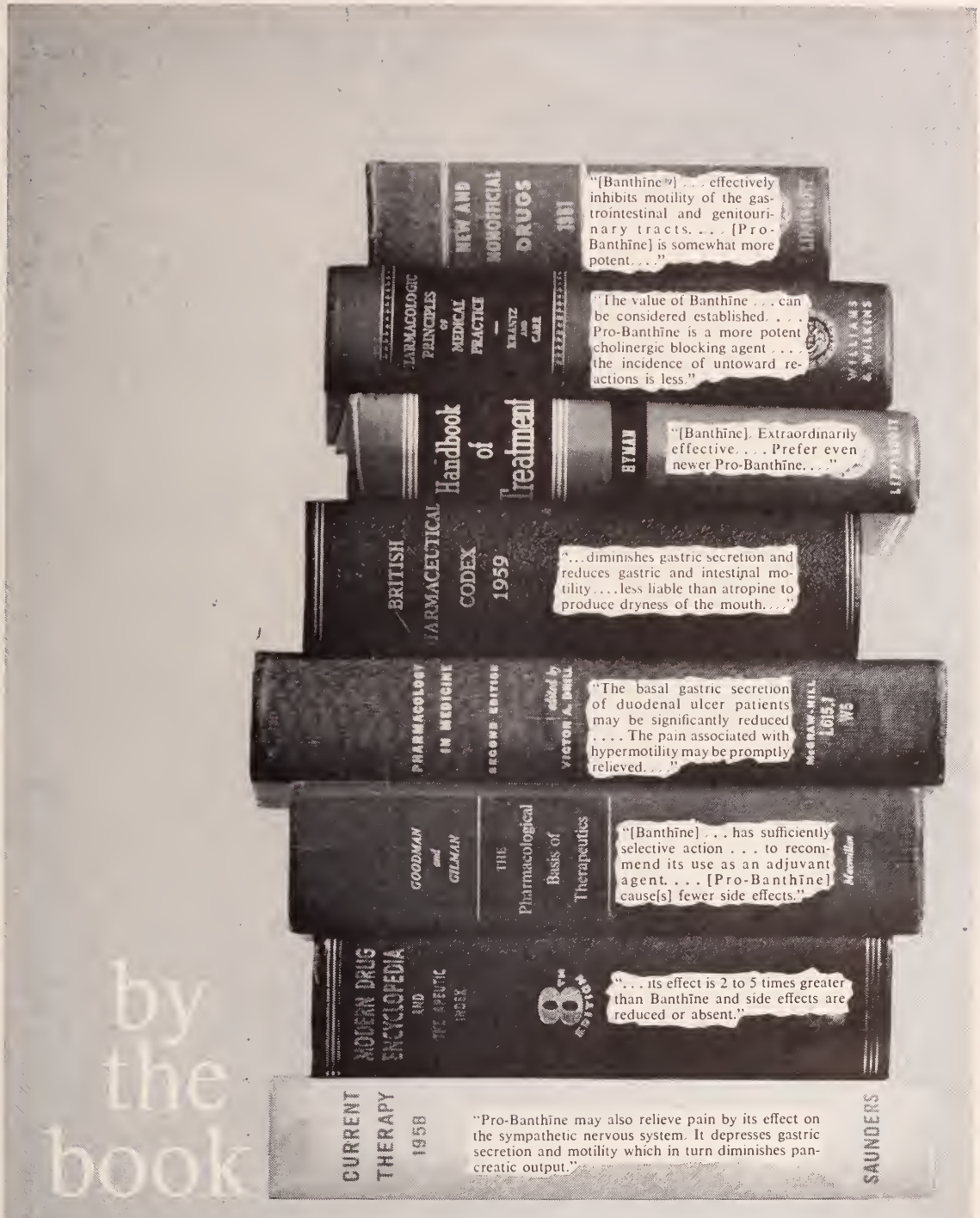
The next scheduled Part I (written) examination of the American Board of Obstetrics and Gynecology will be held in various examining centers of the United States, Canada and military bases outside the continental United States on Friday, December 14, at 2:00 p.m. Prospective applicants are urged to request the 1962 Bulletin of the Board containing current rules and regulations before making application. Write Robert L. Faulkner, M.D., Executive Secretary-Treasurer, 2105 Adelbert Road, Cleveland 6, Ohio.

Physicians desiring to contribute to the American Medical Association—Education and Research Foundation should send their checks to the A.M.A. at 535 N. Dearborn Street, Chicago 10. The loan fund made possible by the Foundation is used to guarantee repayment of bank loans made to medical students, interns and residents.

The Southeastern States Cancer Seminar has been scheduled for Thursday, Friday and Saturday, November 15-17, at the Hotel George Washington in West Palm Beach.

The Fourth Annual Dr. Edward Jelks Testimonial Dinner held the latter part of June at the Duval Medical Center in Jacksonville honored in addition to Dr. Jelks 54 other physicians from 14 medical schools within the United States, six foreign countries and the Philippine Islands. Dr. Jelks is a former chief of surgery and chief of staff at the Medical Center. He served as president of the Florida Medical Association in 1937.

Among Florida physicians presenting papers at the recent annual meeting of the American Medical Association in Chicago was Dr. Hyman J. Roberts of West Palm Beach. Dr. Roberts addressed the Section on Internal Medicine on the subject "Narcolepsy, Hypoglycemia and Obesity —An Important Clinical Syndrome."



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Meetings

August

Postgraduate Obstetric-Pediatric Seminar, Twelfth Annual, August 15-18, Colonial Inn, St. Petersburg Beach

September

Seminar in Neurology, September 27-29, University of Florida College of Medicine, Gainesville

October

Florida Society of Anesthesiologists, October 6-7, Hawaiian Village Motel, Tampa

Florida Academy of General Practice, Thirteenth Annual Scientific Assembly, October 19-21, Deauville Hotel, Miami Beach

Florida Orthopedic Society, Fall Meeting, October 20-21, Boca Raton Club, Boca Raton

Florida Psychiatric Society, October 20-21, Nassau Beach Hotel, Nassau, B.W.I.

Third Annual Medical Seminar Cruise, University of Florida College of Medicine, October 29-November 5, MS Bergenjford

November

Southern Medical Association 56th Annual Meeting, November 12-15, Hotel Fontainebleau, Miami Beach

Florida Obstetric and Gynecologic Society, November 30, December 1-2, Crystal River

Florida Pediatric Society, November 15-18, Causeway Inn, Tampa

Southeastern States Cancer Seminar, November 15-17, Hotel George Washington, West Palm Beach

December

Florida Society of Ophthalmology and Otolaryngology, December 7-9, Paradise Point Hotel, Crystal River

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UROLOGIST WANTED: Group. Growing area. No urologist. County population 56,000. Pleasant living. Two private hospitals in operation; community hospital in construction. Junior college opening. Contact DURHAM YOUNG HOSPITAL & CLINIC, John Kadlec, Adm., 1027 W. Main St., Leesburg, Fla. Phone 787-3131.

GENERAL PRACTITIONER WANTED: For one month beginning October 20. Gulf Coast area. Florida license necessary. Write 69-481, P.O. Box 2411, Jacksonville, Fla.

INTERNIST WANTED: For association or solo practice. Office and lab available. Arrangements flexible. Write or call John E. Gordon, M.D., 31 S. E. 24th Ave., Pompano Beach, Fla. Phone Whitehall 1-5629.

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FOR RENT—DOCTOR'S OFFICE: Fort Lauderdale at 211 S. E. 12th Ave. Very choice. New condition. Central air and heat. Available Oct. 1. 1,060 sq. ft. @ $2.75 per ft. Five-ten year lease. Write owner, Frank E. Mayer, 1111 S. E. Second St., Fort Lauderdale, Fla.

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FOR SALE OR LEASE: Jacksonville area. Will sell or lease building, furniture and equipment of recently deceased General Practitioner. Hospital facilities 10 minutes drive. Price based on tangible assets. For further particulars write to 69-485, P.O. Box 2411, Jacksonville, Fla. or phone 284-3434, Green Cove Springs.

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Kahn, Alvin J., Titusville
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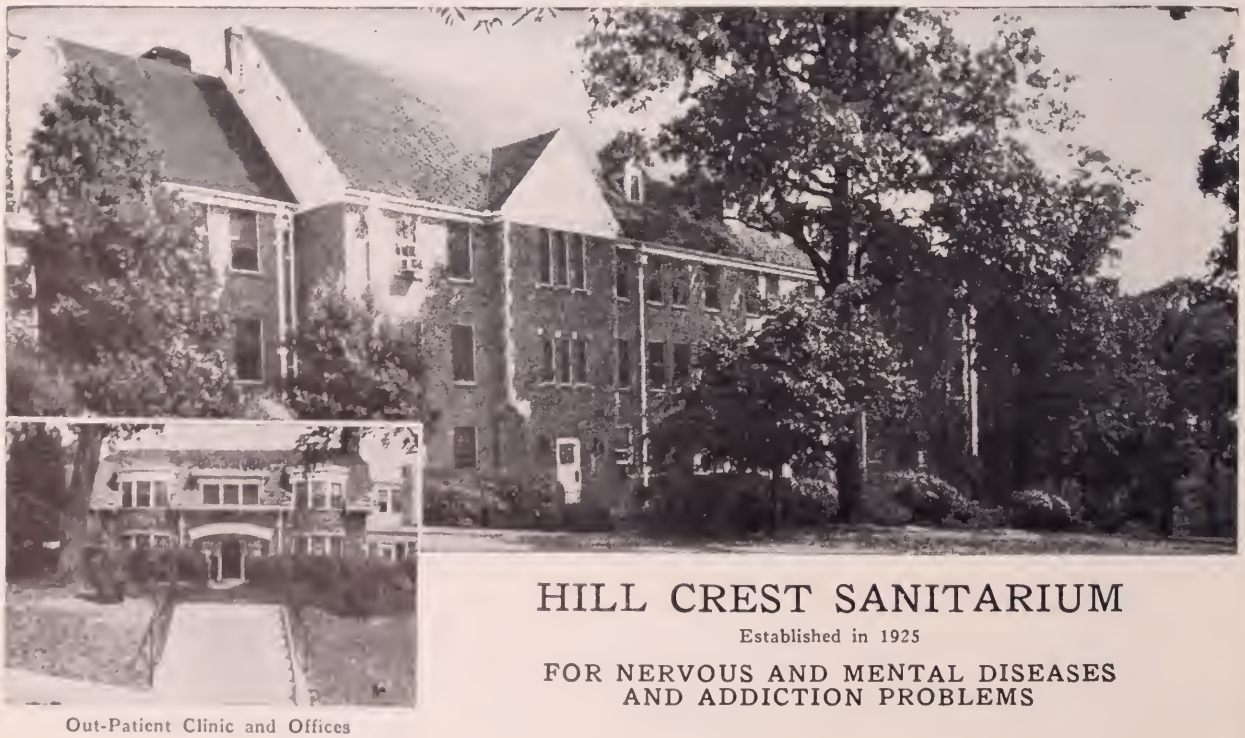


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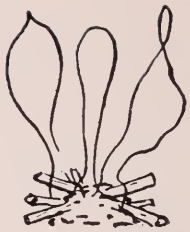
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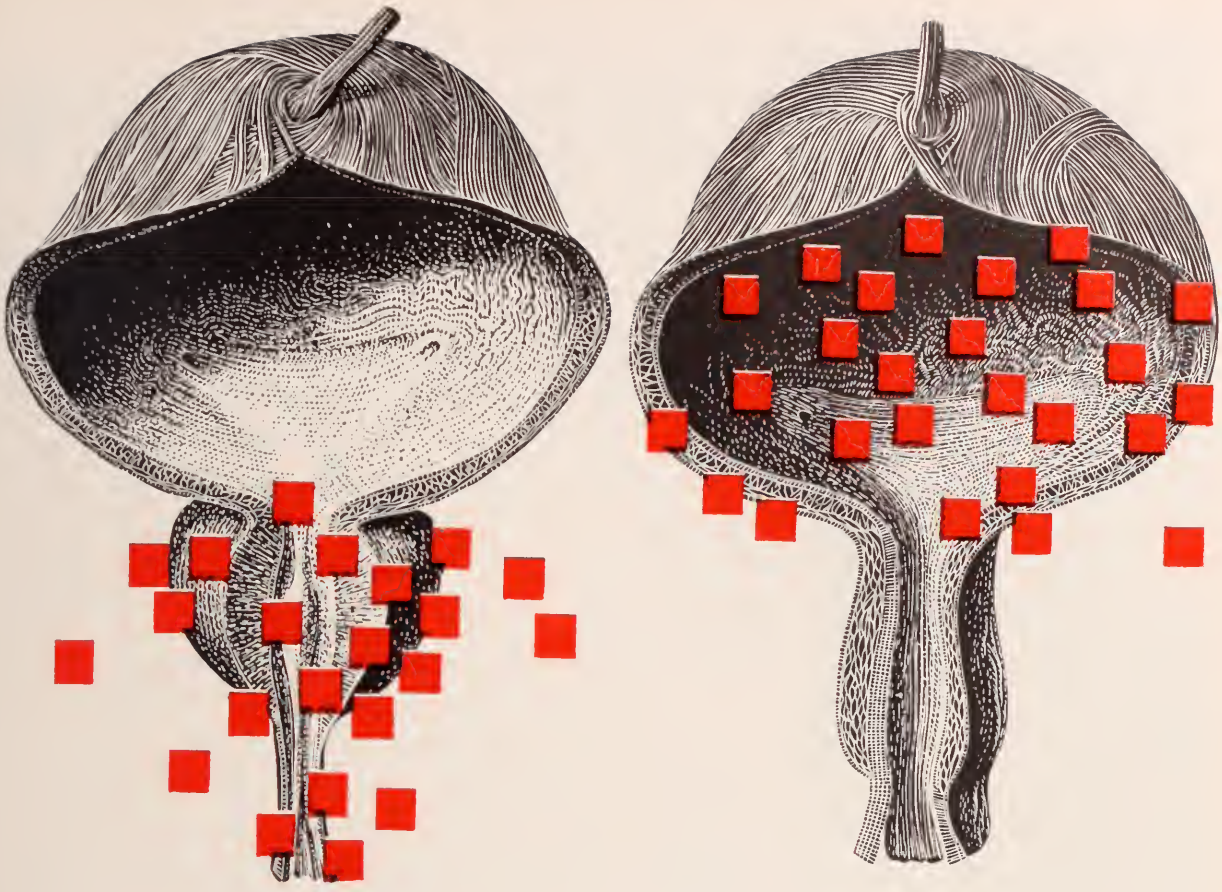
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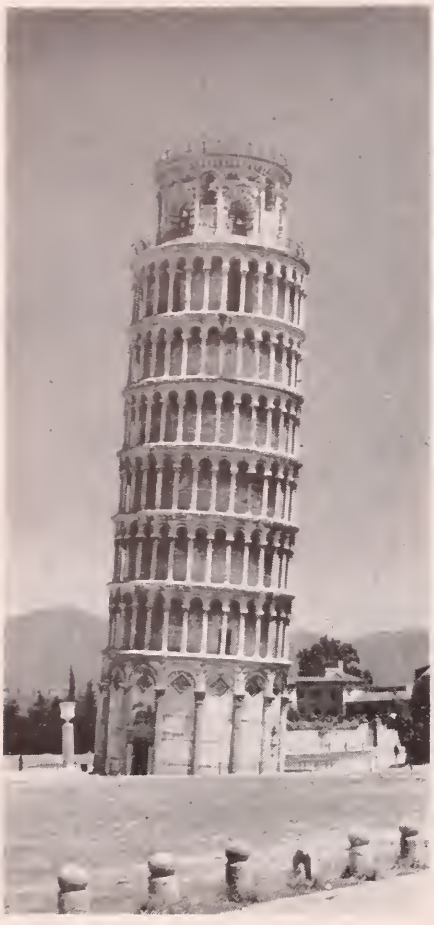
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1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

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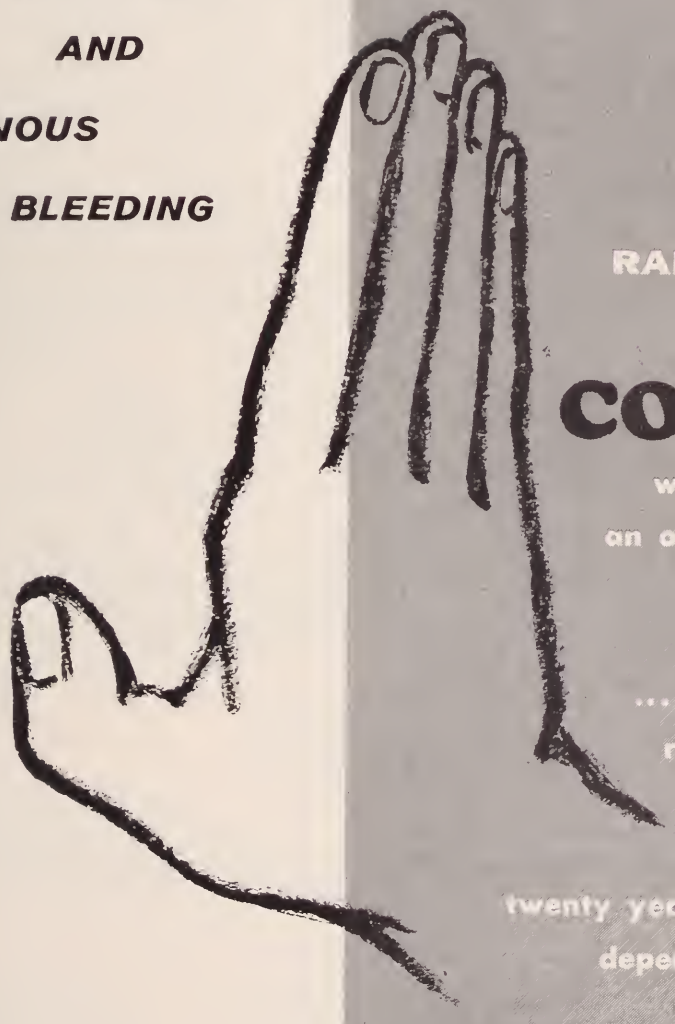
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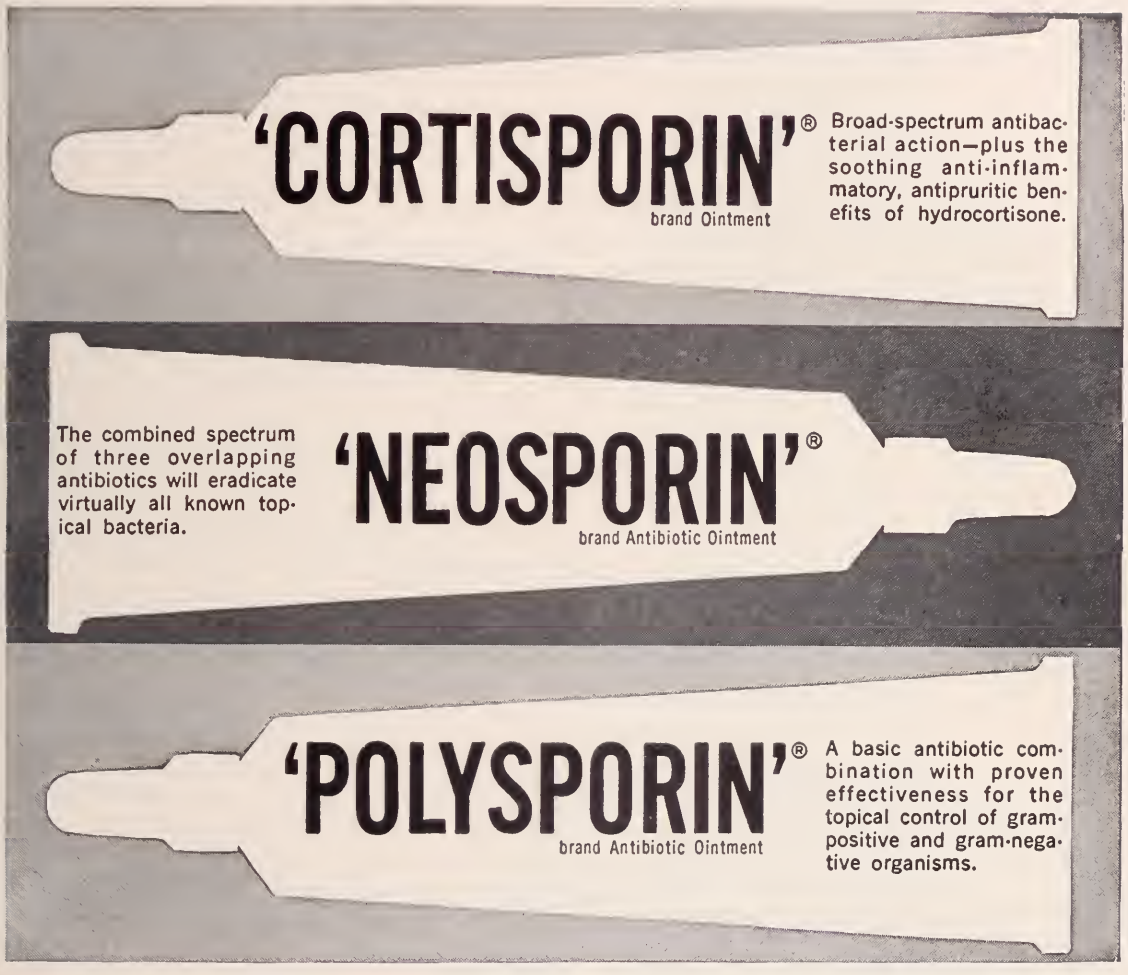
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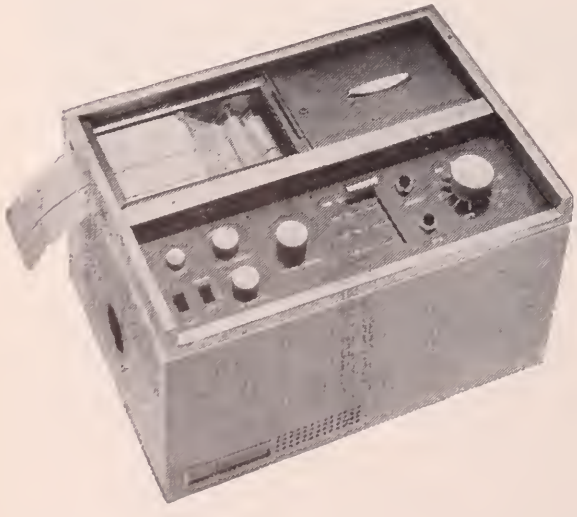
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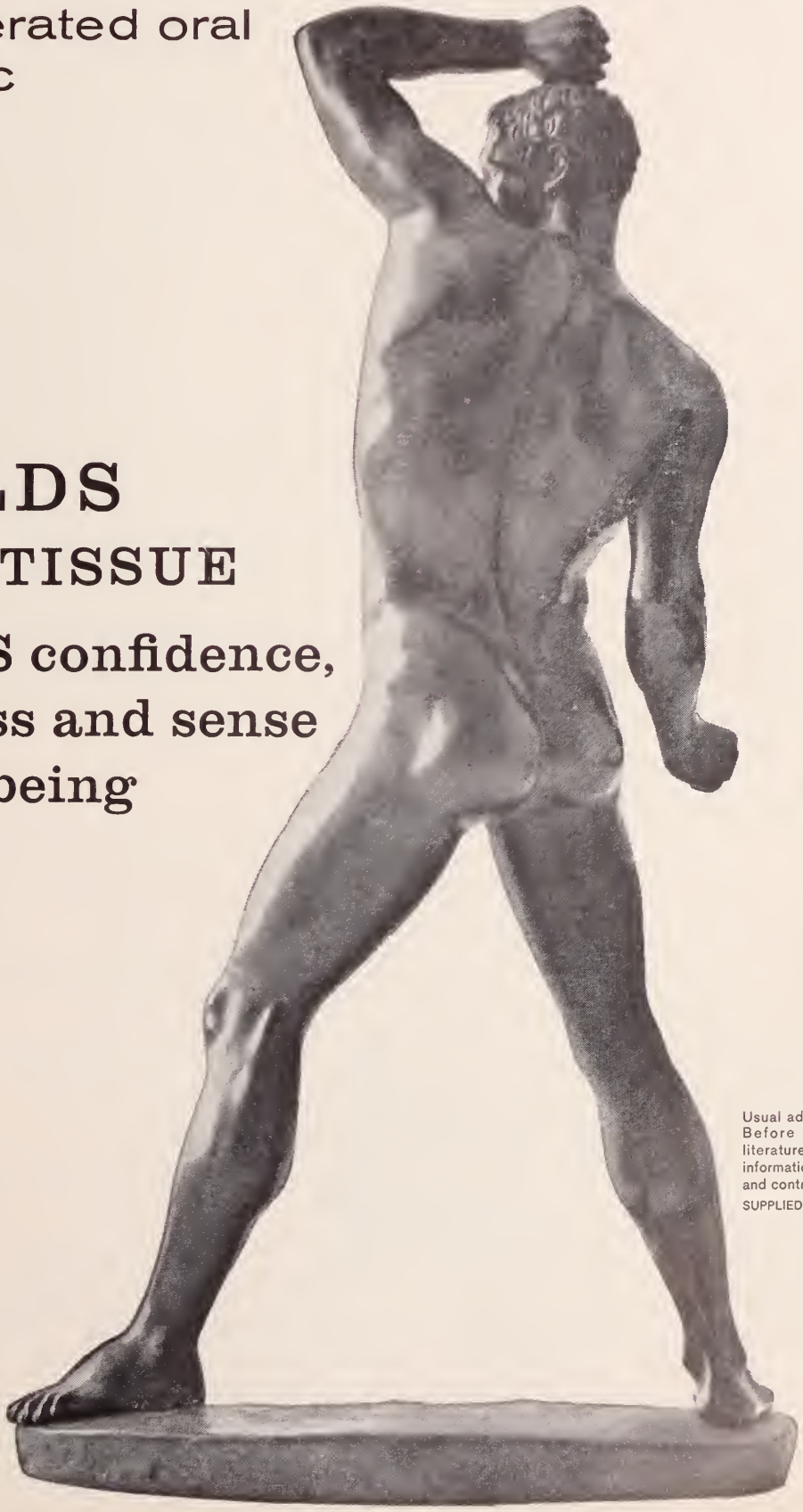
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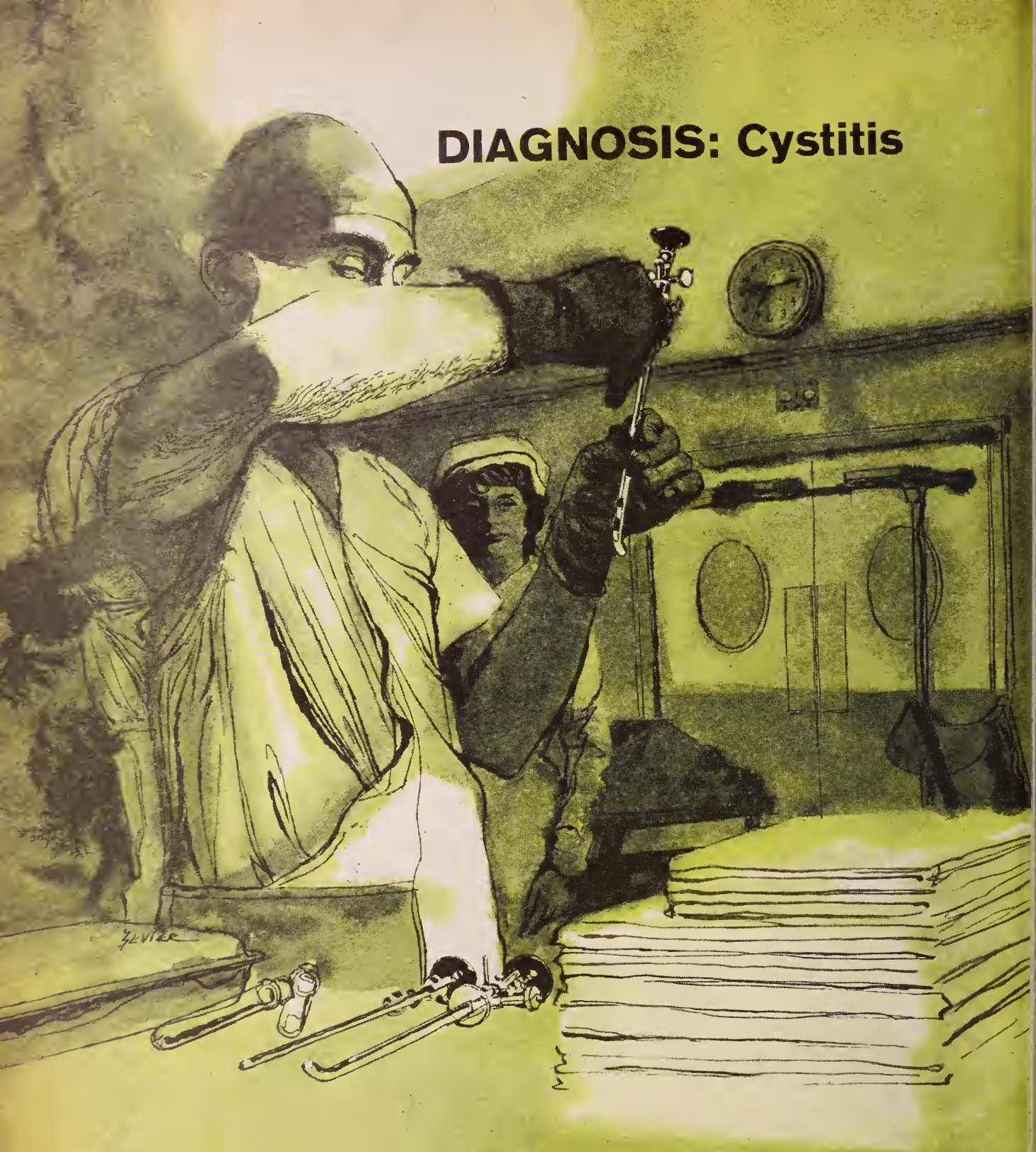
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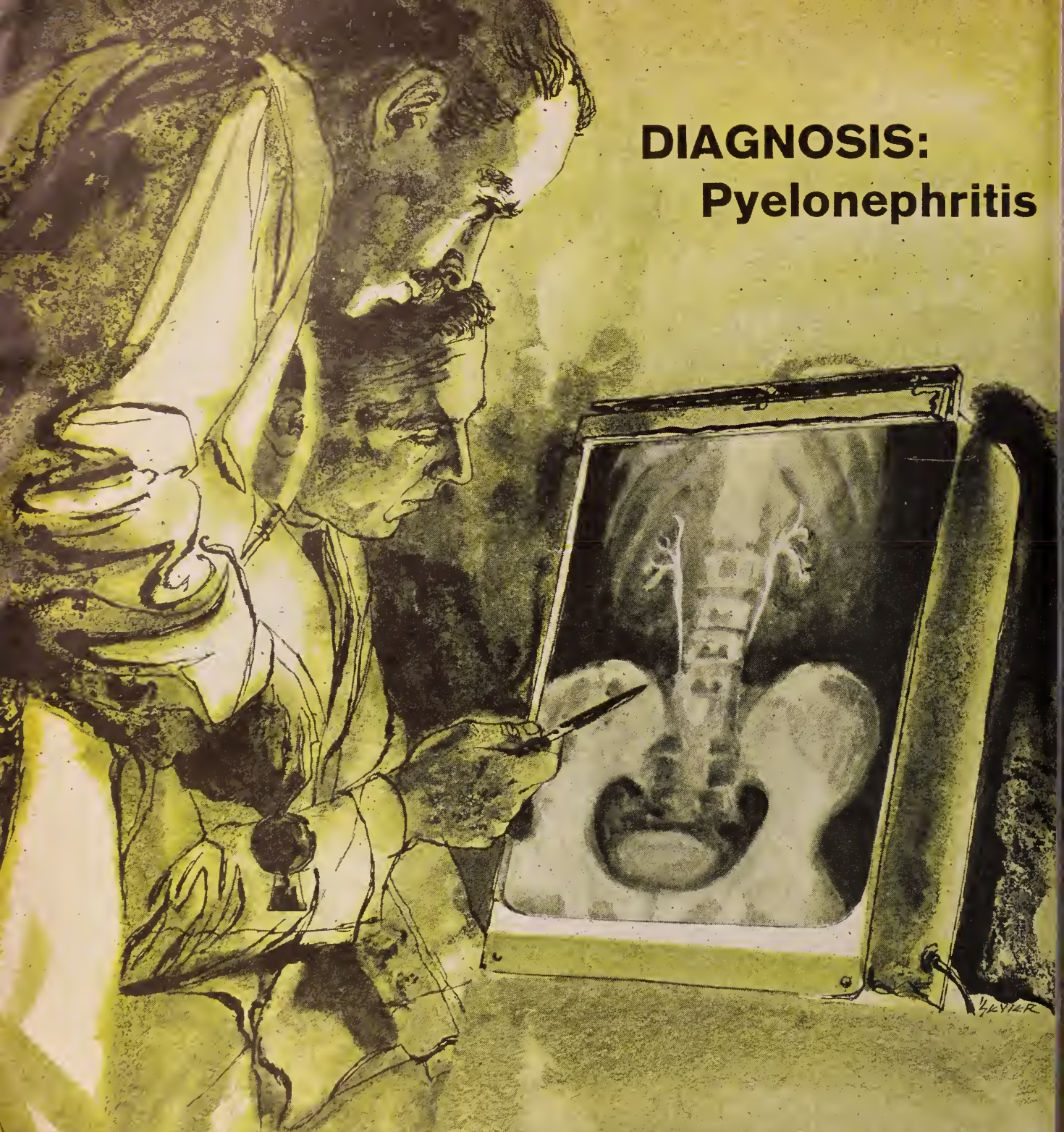
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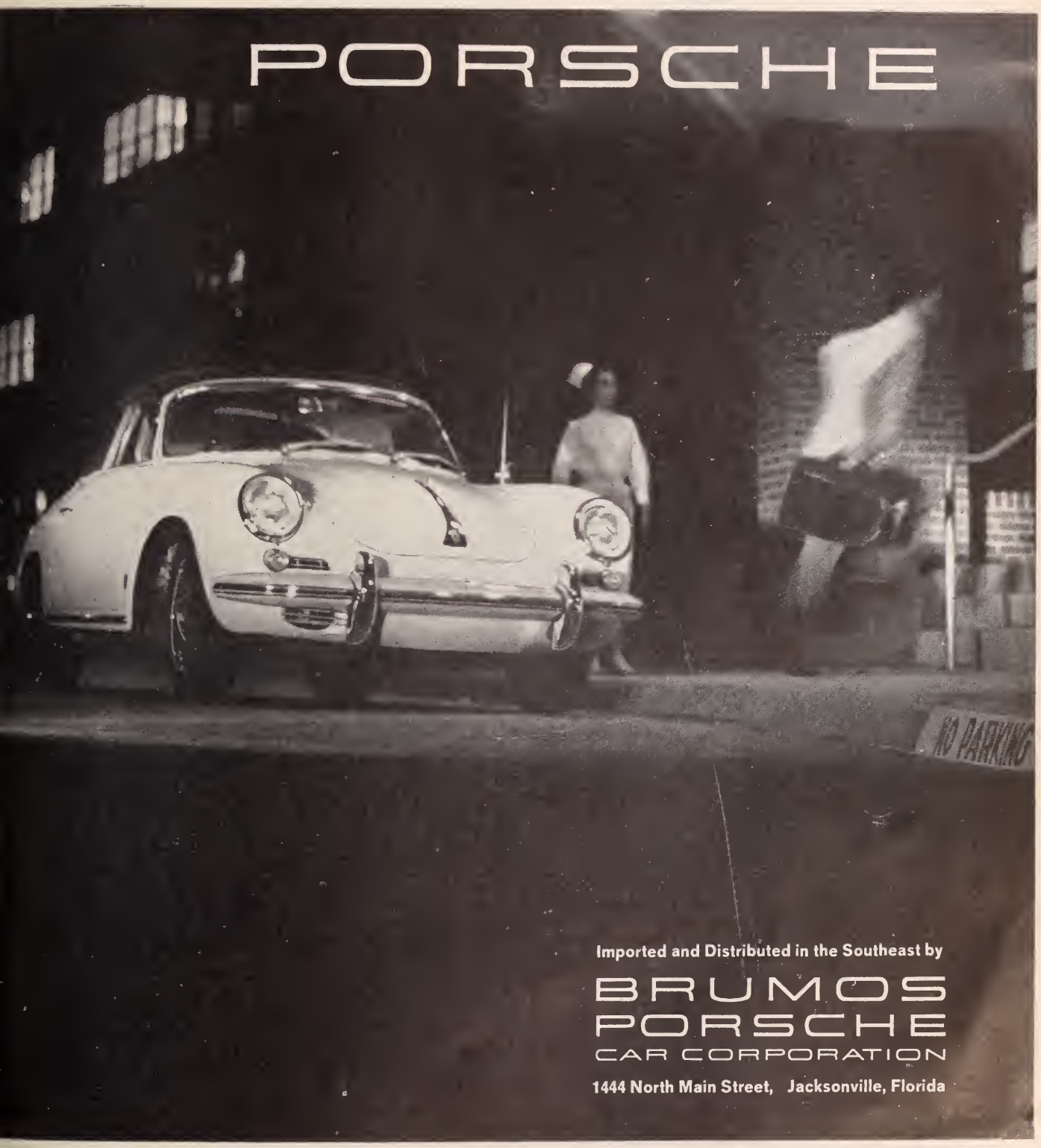
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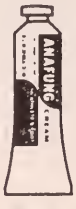
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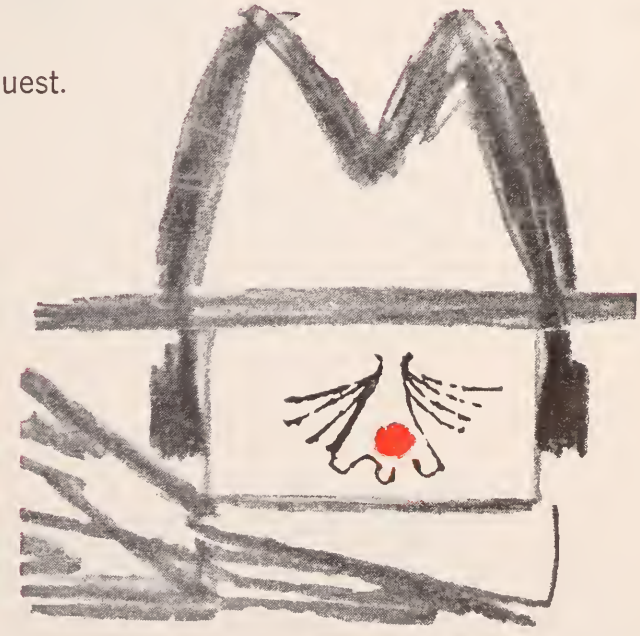
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1. Kolodny, A.L.: Dis. Nerv. System *22*:151 (Mar.) 1961.

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1. Ford, R. A., and Blanchard, K: Journal-Lancet 78:185, 1958.

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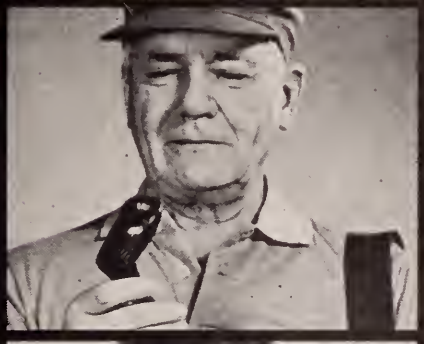
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*Schaefer, L. E.: Clin. Med. 8:1343, 1961.

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On Scaphoid Fractures and Their Complications

Lee J. Cordrey, M.D.
TAMPA

The scaphoid, or navicular, is the most frequently fractured carpal bone. If the injury is not diagnosed early and treated adequately, it may result in irreparable damage to the wrist. A considerable body of literature has accumulated relative to the diagnosis and management of fractures of this type, and yet the end results of treatment all too frequently leave both surgeon and patient dissatisfied. Because of the multiplicity of techniques advocated in treating navicular fractures and their attendant complications, the surgeon, who manages these injuries only infrequently, is often beset with doubt as to the proper approach. To add to the difficulty, prolonged immobilization of the wrist leads to economic hardship for the patient and definite unrest on the part of insurance carriers and employers in industrial cases. Yet ill-considered surgery, in an attempt to hasten rehabilitation, may only gain for the patient a weakened, painful wrist and thumb. The purpose of this paper is to summarize the latest thinking relative to this problem in relation to personal experience.

Anatomical Consideration

The reason for the high incidence of fractures of the carpal scaphoid bone is explained by the fact that it lies in both the proximal and distal rows of the carpus and, with hyperextension and radial deviation, the waist of the scaphoid is forced sharply against the wedge of the radial styloid. In radial flexion of the wrist, the navicular slides ulnarward along the slanted concave surface of the distal radius and, in so moving, tilts anteriorly on its long axis so that the tuberosity of the navicular moves anterior to the radial styloid. The scaphoid may be divided anatomically into the tubercle, which is the extra-articular portion of the distal pole, the waist and the proximal pole. The two major surfaces of the scaphoid are covered by articular hyaline cartilage separated by a ligamentous ridge which lies on the more volar aspect of the bone. It is through this ridge that the bone receives its nutrient vessels. Obletz and Halbstein[1] pointed out that in two thirds of the bones, the vessels are equally distributed throughout the length of the ligamentous ridge. In the other third, there are no vessels directly entering the proximal half of the bone, and in these scaphoids, fracture of the proximal pole may result in isolation of the fragment from its blood supply with resulting avascular necrosis.

Radiological Features

Fractures of the scaphoid may be classified as follows:

1. Fractures of the tubercle
2. Fractures of the waist
3. Fractures of the proximal pole
4. Comminuted fractures
5. Transscaphoid, perilunate fracture-dislocations

Fractures of the tubercle are, in effect, avulsion fractures. Displacement is usually slight. The fracture may be adequately visualized on routine lateral views of the carpus, but care must be taken not to confuse the tubercle of the scaphoid with the hook of the hamate bone (fig. 1).



Fig. 1. — Fracture of the tubercle is not visualized on the anteroposterior projection and is best demonstrated in the lateral view.

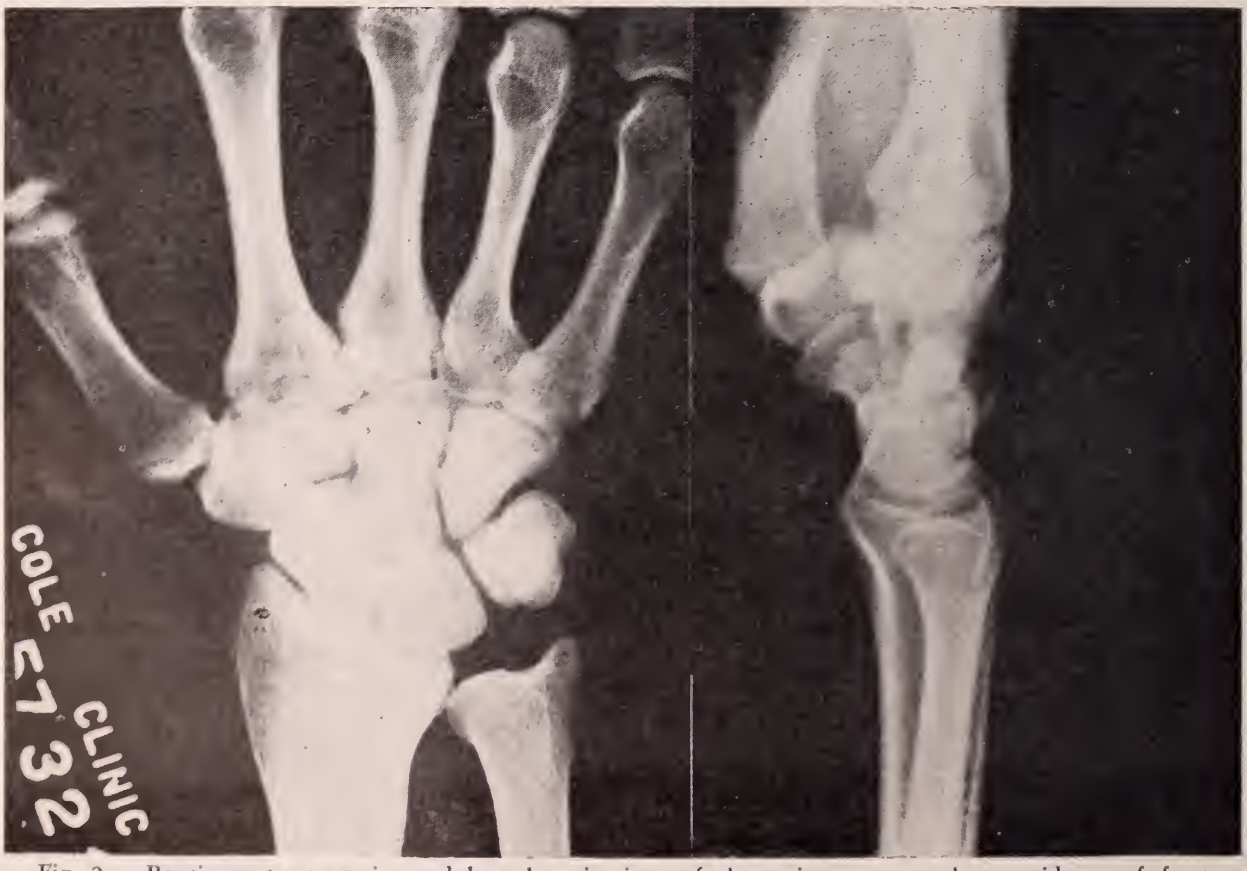


Fig. 2. — Routine anteroposterior and lateral projections of the wrist may reveal no evidence of fracture through the waist of the scaphoid. This patient fell to the outstretched hand and complained of vague pain over the radiodorsal aspect of the wrist. Routine anteroposterior and lateral projections reveal no evidence of fracture of the carpus.



Fig. 3. — An oblique projection or ulnar deviation projection should be routinely taken in x-ray study of all suspected scaphoid fractures. An ulnar stress view of the same wrist as shown in figure 2 suggests a fracture of the waist of the scaphoid. The oblique projection confirms the presence of a nondisplaced fracture. These views should always be taken when there is a suspicion of fracture of the scaphoid.



Fig. 4. — Transscaphoid, perilunate dislocations may not be diagnosed on routine anteroposterior projections. This injury was not recognized for 10 days after this x-ray was taken.

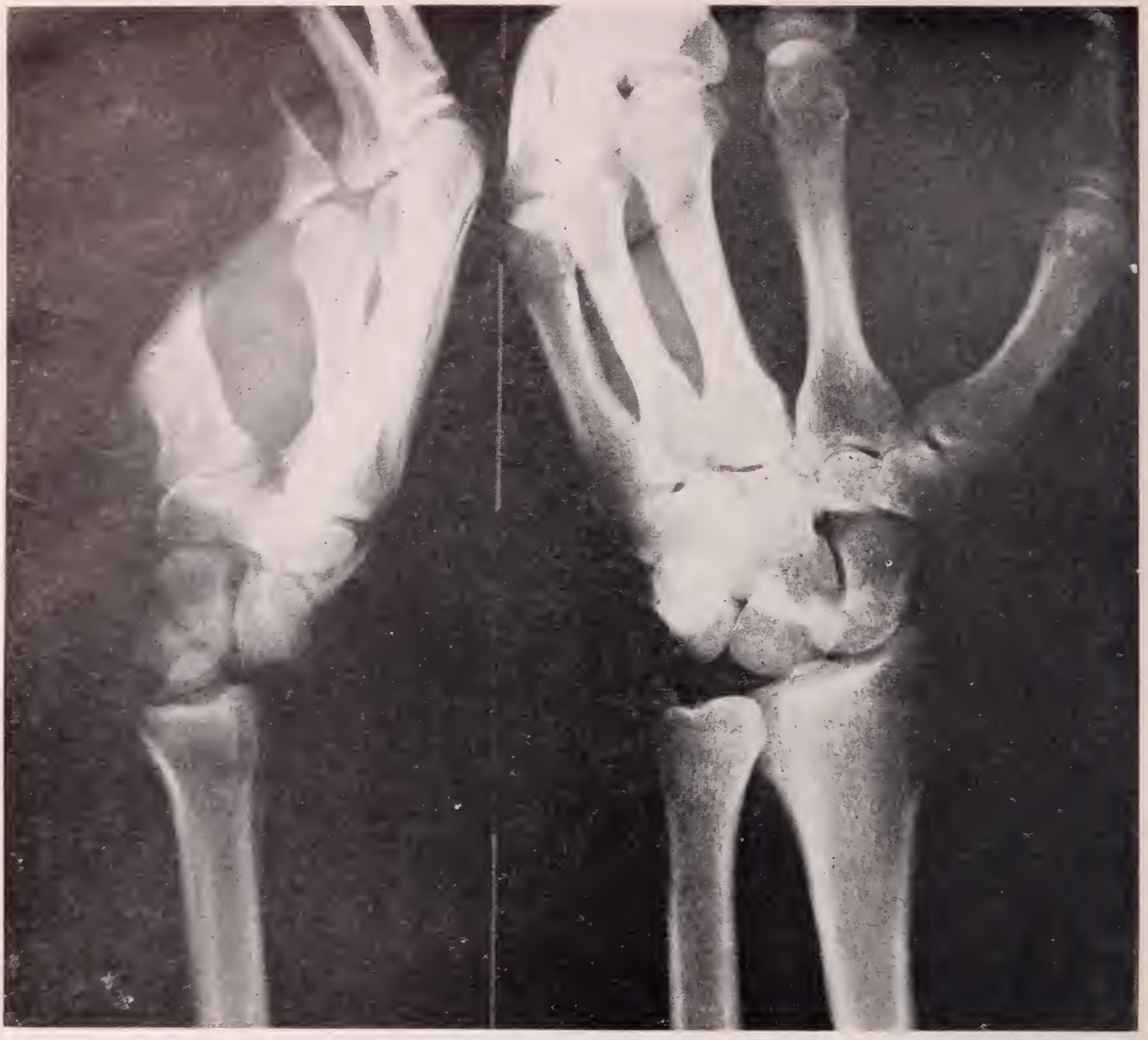


Fig. 5. — A lateral view of the wrist shown in figure 4 discloses the dislocation of the distal row of the carpus together with distal scaphoid dorsal to the lunate and proximal scaphoid. The oblique projection demonstrates the fracture through the waist of the scaphoid.



Fig. 6. — The hand and wrist are immobilized in the "water-glass" position and the cast extended to the elbow. Note the molding of the cast in the palm up to the distal flexion crease.

Fractures through the waist of the scaphoid in the majority of cases show minimal or no separation of the fragments. Routine anteroposterior views of the wrist may not disclose the fracture, and on lateral projections the waist is obscured by the other bones of the carpus (fig. 2). Two additional projections have been found of value in adequately visualizing the waist:

1. An anteroposterior view with the wrist placed in ulnar deviation.

2. An oblique view taken with the hand in approximately 150 degrees supination and with the ulnar border on the cassette (fig. 3).

Fractures of the proximal pole may present the same difficulty in diagnosis as that observed



Fig. 7. — Lateral projection of the same wrist as shown in figure 1 demonstrates excellent progression of union at four weeks.



Fig. 8. — This fracture occurred 12 weeks prior to these x-rays. Note widening of the fracture line with sclerosis of the fracture faces. There is moderate increase in density of the proximal pole.

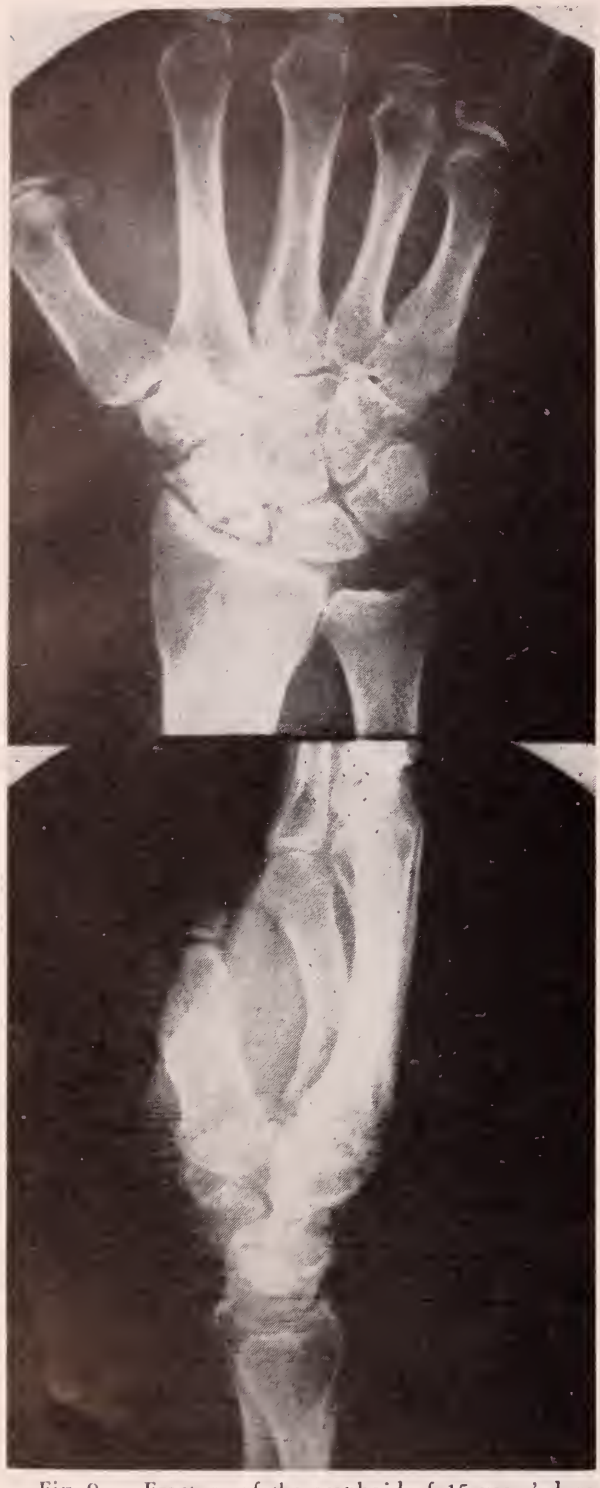


Fig. 9. — Fracture of the scaphoid of 15 years' duration. There is nonunion with marked sclerosis of both fracture fragments. There is spurring of the scaphoid, narrowing of the radiocarpal joint and elongation of the radial styloid, all indicative of osteoarthritic degeneration.

in fractures of the waist, and the same technique for visualization should be employed.

Transscaphoperilunar dislocations are not uncommon and, in spite of the gross anatomical distortion, are frequently not detected on preliminary x-ray evaluation (fig. 4). The dislocated carpus is best observed in the lateral projection. Because of the displacement of the distal pole of the scaphoid with the distal row of the carpus, no fracture line is visualized in the scaphoid, and the proximal one half of this bone remains isolated in its usual anatomical position (fig. 5). The opposite injury to transscaphoperilunar dislocation may occur, and the lunate and proximal pole of the scaphoid may be displaced volarward. Again, this injury is best diagnosed by lateral x-rays of the wrist.

Clinical Features

It is imperative that the diagnosis of fracture of the scaphoid be made early and that treatment be instituted promptly. The classical history is that of a fall to the outstretched, hyperextended hand. Pain following the injury may be minimal, and there may be only slight spasm and splinting of the hand. Movement of the wrist usually accentuates the pain, especially on radial and ulnar deviation. Movement of the thumb is frequently more painful than movement of the wrist. Forced pinch is impossible because of pain in the anatomical snuff box, and this may be considered a diagnostic sign of fracture. Direct palpation over the snuff box elicits pain, though crepitus is rarely, if ever, palpable unless multiple fracture of other carpal bones has occurred. Swelling of the hand is usually slight to minimal, and ecchymosis about the wrist is exceedingly rare.

Management

The patient presenting the history and symptoms here described should be considered to have sustained a fracture of the scaphoid until definitely proved otherwise. The golden period for institution of treatment lies within the first 24 to 48 hours and, even though x-rays may appear to give negative evidence, the injured part should be immobilized. A leather gauntlet or cock-up splint is not adequate, and a circular cast with minimal padding must be applied. The wrist should be maintained in about 30 degrees extension and radial deviation. The cast should extend to the distal flexion crease in the palm and just distal to the elbow. The thumb is immobilized in the "water glass position" in abduction, 15 degrees flexion and mid pronation, and the cast is extended to the distal interphalangeal joint of the thumb. Care must be exercised in immobilizing the thumb to avoid abduction strain at the metacarpophalangeal joint, and this joint should be placed in slight flexion to avoid hyperextension (fig. 6).



Fig. 10. — X-ray of the wrist shown in figure 9, 12 weeks following radiocapitate fusion. When there is advanced degenerative change as noted in figure 9, radiocapitate fusion is indicated. Note preservation of the radioulnar joint. The pull-out pins are employed to secure the graft and can be removed at 12 to 16 weeks post fusion. Arthrodesis is usually solid at eight weeks.

1. Fractures of the tubercle:

A fracture through the tubercle will ordinarily heal in from four to six weeks since it is extrasynovial and possesses an abundant blood supply. No residual permanent disability should be anticipated following these fractures (fig. 7).

2. Fractures of the waist:

A. Fractures through the waist must be uninterruptedly immobilized until there is x-ray evidence of solid, osseous union with obliteration of the fracture line. If the initial x-ray gives negative evidence, usually sufficient absorption of the fracture surfaces will occur within two weeks after injury to permit corroboration of the presumptive diagnosis. If immobilized early and continuously, these fractures usually unite in 12 to 16 weeks.

B. If the diagnosis has not been established early and the patient presents with established absorption of the fragments at the fracture, and with so-called cystic degeneration of one or both fragments but no sclerosis, a trial immobilization



Fig. 11. — Fracture of the scaphoid with volar dislocation of the distal carpal row and the distal fragment of the scaphoid. The wrist was opened and the fracture of the scaphoid fixed with a screw. There was full motion of the wrist six months post injury (fig. 11a).

for a period of 12 weeks is justified. If there is no evidence of union by the end of that time, then bone grafting of the fracture is indicated. The radial styloid may be employed as the donor site for the graft, and if there is evidence of elongation or "spurring" of the styloid, then styloidectomy is indicated.

C. If there is established sclerosis of the fracture faces, then nonunion is definite. A period of immobilization is not indicated, and immediate grafting is necessary to secure union. Care must be exercised to avoid stripping the ligamentous attachments of the scaphoid during surgical intervention to prevent aseptic necrosis of the proximal fragment. Similiar care must be exercised to avoid trauma to the articular surfaces of the scaphoid and adjacent carpal bones. Many techniques for grafting have been described, but the principle is that a ¼ inch tunnel is drilled through the long axis of the scaphoid and a bone graft driven into this tunnel. Simple drilling across the fracture has been advocated, and union has been

demonstrated following this procedure; however, the uncertainty of establishing union following this procedure has led to its abandonment.

3. Fractures of the proximal pole:

Fractures of the proximal pole, as indicated, may deprive the smaller proximal fragment of its blood supply. If this occurs, then delayed union or avascular necrosis will supervene (fig. 8).

A. Wagner,[2] in an excellent analysis, has demonstrated that union will occur, even in the presence of aseptic necrosis, and that the avascular fragment will be restored in a high percentage of cases if immobilization is maintained continuously until there is evidence of reconstitution of the fragment. This may require a period of a year or more, and at the conclusion of this period, early arthritic changes may already have made their appearance.

B. In the presence of an avascular proximal fragment, or if nonunion is established, excision of the proximal fragment offers the opportunity for most rapid rehabilitation of the wrist. If definite elongation of the radial styloid has occurred, then styloidectomy should be performed at the same operative sitting. This, by no means, restores the wrist to an asymptomatic state, and invariably there is some discomfort on heavy lifting or repetitive activity. Some patients note definite weakness of the wrist following this procedure. Excision of the entire navicular is not indicated and invariably leads to a weak, painful wrist. Replacement of the navicular by any prostheses now available has fallen into disrepute and is contraindicated.

C. In considering the wrist with either nonunion or avascular necrosis and advanced, severe, degenerative change, arthrodesis of radius, scaphoid, lunate, and capitate affords the patient a stable, painless wrist (fig. 9). The wrist should be fixed in not more than 10 degrees extension and approximately 5 degrees ulnar deviation. Greater extension of the wrist is cosmetically undesirable and provides less functional grasp, especially for repetitive work on flat surfaces. If the metacarpocarpal joints are not included in the fusion, some resilience is maintained in the hand and the normal 5 to 10 degrees range of flexion and extension at these joints makes the hand less rigid (fig. 10). Care, of course, must be exercised to avoid damage to the distal radioulnar joint, thus maintaining full supination and pronation of the forearm.



Figure 11a

Transscaphoperilunar dislocations:

Transscaphoperilunar dislocations can rarely be managed by closed reduction and immobilization since the post reduction position of the single entities is completely opposite. Open reduction of the dislocation produces spontaneous reduction of the fracture, and the fracture fragments may be maintained in position by use of a single ¾ inch screw placed the same as for the insertion of a graft. If the reduction of the lunate is unstable, it may be maintained in position by a single "pullout" Kirschner wire, which is removed three weeks postoperatively. Plaster immobilization of the forearm and hand with the thumb included is maintained for a total period of six weeks (fig. 11).

Summary

Anatomical features, clinical findings, roentgen findings, and management of the fractures of the scaphoid are reviewed.

If serious, disabling sequelae are to be avoided, treatment of these fractures requires early, accurate diagnosis and specific management.

Specific measures are advocated for those fractures in which complications develop.

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4801 Woodmere.

Cystinosis
Recent Clinical Observations With Case Report

W. Jerome Knauer Sr., M.D.
Jacksonville
and Capt. Norris L. Newton (MC) USAF

The diagnosis of cystine storage disease is most often made from the biomicroscopic finding of corneal cystine crystals. The cornea, and frequently the conjunctiva and iris, glisten with tinsel-like silvery opacities which reflect beautiful polychromatic hues on specular illumination. Some observers have remarked that the eye appears as if it had been decorated for Christmas (fig. 1).

Cystine storage disease associated with renal dysfunction, rickets, and dwarfing has been the subject of dozens of papers since 1924, when Lignac established cystinosis as a disease entity, having found crystalline cystine in a number of organs. Fanconi (1931), de Toni (1933), and Debré (1934) all described a similar clinical syndrome in children, which included hypophosphatemic rickets, nondiabetic glycosuria, albuminuria, and acidosis. It was not, however, until about 1952 that it became apparent to most workers that the syndrome of Fanconi-de Toni-Debré was essentially the same as the cystine storage disease described by Lignac. The name Lignac-Fanconi disease was appropriately given to the syndrome by Bickel and others[1-8] in an exhaustive clinical study of 14 cases of the disease.

Cystinosis is a rare systemic disorder of infants and children characterized by widespread deposition of cystine crystals in many tissues, chiefly the bone marrow, kidneys, liver, spleen, adrenal glands and lymph glands, in addition to the eyes. Its clinical manifestations may include all or some of the following: dwarfism, renal rickets, acidosis, hypophosphatemia, nondiabetic glycosuria and aminoaciduria.

Pathogenesis

Fanconi assumed a renal origin of the disease, postulating congenital abnormalities of the proximal tubules with impairment of the reabsorptive mechanism. Other workers suggested a prerenal or metabolic cause of the disorder. Bickel and his associates discussed all findings which support the idea of a disorder of intracellular metabolism, especially of the reticuloendothelial system. Bickel and Hickmans[6] favored the idea that not only cystine but all amino acids were involved because they thought they had demonstrated a generalized aminoacidemia in some of their cases. More recent and chemically accurate work, however, has proved that plasma amino acids are not increased.[9] In short, the generalized aminoaciduria does not seem to result from anything other than a faulty renal tubular reabsorption of amino acids from the glomerular filtrate.

The insoluble cystine crystals accumulate throughout the tissues of the body and have a devastating effect upon the kidneys in particular. The nephrotoxic effect of cystine is well established. This effect has been experimentally demonstrated by Cox, Smythe and Fishback,[10] Curtis and Newburgh,[11] and Lewis[12] by feeding small daily doses of cystine to rats and rabbits. The animals exhibited urinary changes not unlike those in patients with cystinosis and died from uremia. Further, it is noteworthy that several other diseases cause similar renal pathophysiology through a specific poisoning of the renal tubule and impairment of the reabsorptive mechanism; for example, Wilson's disease[13] is associated with copper deposition about the tubule. Other heavy metals, especially lead, have been shown to damage the proximal renal tubule.[14]

Whether renal tubular dysfunction results from the morbid histotoxic changes of cystinosis or other toxic etiology, the clinical renal picture is about the same. It is one of faulty tubular reabsorption of materials from the normal glomerular filtrate. Since, however, the renal tubular dysfunction becomes apparent, clinically, early in the disease, probably before the extreme changes of renal tubular dilatation and degeneration, glomerulosclerosis, and frank granulomata formation, many workers have postulated an enzymatic etiology. A large number of enzyme and coenzyme

systems require free sulfhydryl groups for activity; inhibition of these free sulfhydryl groups might well account for the multiple defects of the Fanconi syndrome. Morgan and Friedmann[15] demonstrated that maleic acid forms additional compounds with sulfhydryls and can produce a renal picture not unlike the Lignac-Fanconi syndrome. It may well be that cystine acts to inhibit sulfhydryl-dependent enzyme systems within the kidney. Whatever the precise mechanism of the morbid process may be, it is apparent that it cannot be fully explained on the simple basis initially proposed by Fanconi.

Clinical Course

The disease usually manifests itself before the age of two years, and the renal damage progresses to chronic glomerulonephritis and renal rickets. Uremia, or intercurrent infection to which children with cystinosis are highly susceptible, eventually causes death, most frequently before the age of 10 years.[16] In the case here reported the patient showed evidence of retardation at nine months of age with death ensuing at the age of eight years. Since the myriad deposits of fine refractile crystals in the anterior corneal stroma and superficial layers of the conjunctiva can be readily recognized on slit lamp examination or with powerful illumination, the diagnostic value of the ophthalmologic findings is particularly important, as illustrated by our case and the cases of Garron[17] and Cogan and his associates.[18]

Report of Case

A white child, aged five and a half years, was first examined by one of us (WJK) in September 1958 because her mother thought her vision was impaired. She was under the care of Dr. J. K. David Jr., a local pediatrician. There was a history of polyuria and failure to gain weight at the age of nine months; in her second year, rickets developed, but responded to treatment with moderately high dosage of vitamin D. Since that time her growth and development had been poor. On several occasions she had been admitted to Baptist Memorial Hospital with dehydration, necessitating administration of parenteral fluid. A sibling had died of what was believed to be diabetes insipidus, but in retrospect was probably cystinosis.

On ocular examination the visual acuity was 4/100 in the right eye and 20/40 in the left eye. In the right eye there was a large angle esotropia. Slit lamp examination disclosed the presence of many crystals in the corneas suggesting a diagnosis of cystinosis. As the patient was to go to Baltimore within the week for further study of her case at the Pediatric Department of The Johns Hopkins Hospital, no biopsy was performed.

In early October, the child was admitted to the Harriet Lane service of The Johns Hopkins Hospital for evaluation of the renal disease associated with retardation of growth and earlier rickets. Mentally alert and of pleasing disposition, she was retarded in height and growth by about a year and a half (fig. 2). Extensive laboratory studies were performed. The urine at times contained albumin, at times glucose, and in general there was low osmolarity in the region of 220 to 258. Chromatography

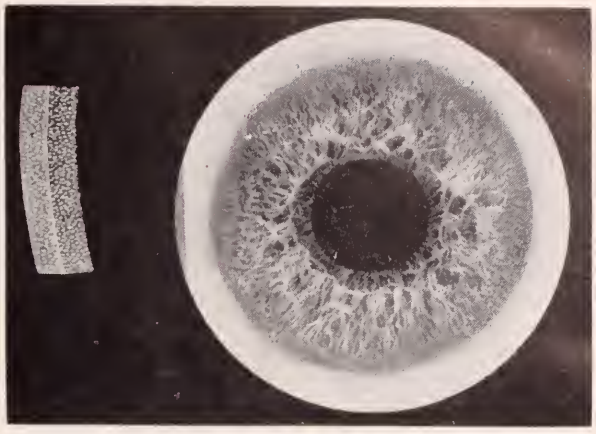


Fig. 1. — Artist's drawing (Annette Burgess) showing crystals and diffuse corneal involvement in the case here presented.

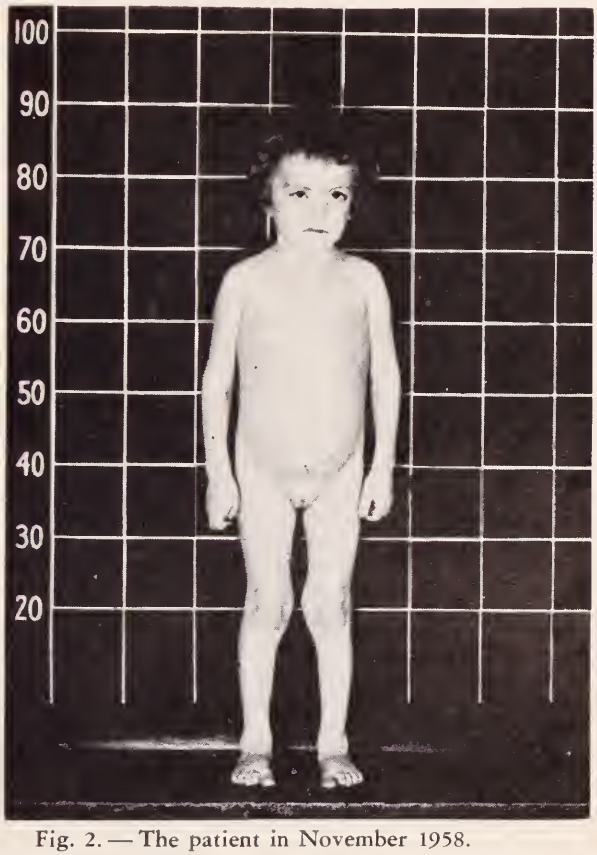


Fig. 2. — The patient in November 1958.

for various amino acids gave equivocal quantitative results. A generalized aminoaciduria, however, was present. Urinary glycine was 117 mg. and serine 147 mg. in 24 hours. On initial blood electrolyte studies, the carbon dioxide combining power was 14.9 mEq., serum sodium 147 mEq., chloride 97.5 mEq., and serum potassium range from 2½ to 3 mEq. per liter, with calcium 11.7 mg., phosphorus 4.2 mg., serum urea nitrogen 9 mg., total serum protein 8.3 Gm., albumin 5.2 Gm. and globulin 3.1 Gm. per hundred milliliters. Later serum urea nitrogen determinations ranged as high as 25 to 30 mg. Some changes in the electrolyte picture of course occurred with the institution of alkalization and potassium replacement therapy.

X-ray examination demonstrated healed rickets. The blood picture was roughly within normal limits. Two bone marrow aspirations failed to give evidence of cystine crystals. Ocular examination, however, demonstrated their



Fig. 3. — a. Microscopic section of rectus muscle tendon showing cystine crystals. b. Microscopic section of conjunctiva showing cystine crystals. c. Microscopic section of vaginal mucosa showing cystine crystals.

presence in the cornea and conjunctiva. A third bone marrow aspiration then revealed a few cystine crystals.

For ocular examination at this time the patient came under the care of one of us (NLN). Surgical treatment for the esotropia was carried out, and biopsies of the muscle tendon, the conjunctiva, the buccal mucosa, and the vaginal mucosa were obtained. Microscopic studies showed that cystine crystals were present in the mucous membrane of the eye, in the rectus muscle tendon, and in the mucous membrane of the vagina, but not in the buccal mucosa (fig. 3). X-ray diffraction studies established that the substance present in the tissues was cystine. Chromatography demonstrated the presence of cystine in the conjunctiva, muscle tendon and vaginal mucosa, but not in the buccal mucosa. It was concluded that these findings somewhat supported the idea of an enzymatic basis of cystinosis and suggested that the patient's saliva was capable of clearing the cystine from the mouth. In line with the view current at the time that alkalization was accepted therapy for cystinosis, sodium and potassium citrate were prescribed, and vitamin E therapy was combined with the alkalizing agents.

The patient returned to her home in Jacksonville, and remained under the care of Dr. David and one of us (WJK) for seven months, doing reasonably well and experiencing no significant illnesses, but showing little change in growth or appearance. In May 1959, she returned to Baltimore for further studies at The Johns Hopkins Hospital. On physical examination there, her height was 36 inches, a height age of 33 months, which represented no significant growth since the measurement in October 1958. The blood pressure was 100/50 mg. Hg. The strabismus persisted in spite of the previous attempt at correction. The bone age was approximately five years, and there was no evidence by x-ray of any recurrence of rickets.

Hospitalization at this time was primarily for reassessment of the chemical and renal situations and ophthalmologic re-evaluation. The chemistry values represented little change since the evaluation seven months previously. The potassium remained below normal, and the blood urea nitrogen was slightly higher than on previous determinations. No significant change was observed in the cystine deposits in the eyes.

Although no marked progression of the disease was evident at this time, there was no indication that the vitamin E therapy had altered the process significantly. An attempt was made to use cystine reductase therapeutically by applying it topically to the eye. A suspension of cystine reductase (coenzyme I) suitable for ophthalmic use was prepared by Nickerson[19] from brewer's yeast, and the frozen material was sent to The Johns Hopkins Hospital for trial. Its use for one week produced no evidence of reduction of crystalline deposits, and it was decided to discontinue the drops because of a slight ocular irritation resulting from their use. In the meantime, the patient continued to receive vitamin E, Provera and electrolyte therapy.

She returned to Jacksonville and entered school, where she did well for more than a year. Examination of the eyes by one of us (WJK) at three month intervals from the time of the initial examination in September 1958 consistently showed the usual amount of crystals. The final examination on May 29, 1961, gave essentially the same results as previous examinations except that the vision had improved remarkably, being 20/100 in the right eye and 20/20 in the left eye.

Dr. David reported progressive deterioration in renal function and in November 1960 several episodes of rapid deep respirations lasting a few hours. At that time the patient had an episode of carpopedal spasm and was admitted to Baptist Memorial Hospital for study and therapy. Laboratory studies indicated the blood urea nitrogen was 74.6 mg. per hundred milliliters, blood chloride 109 mEq., carbon dioxide combining power 14 mEq.; sodium 136 mEq., potassium 4.2 mEq., calcium 7.0 mg. and phosphorus 6.8 mg. per hundred milliliters. The results of urinalysis were specific gravity 1.003, albumin 3 plus, glucose a trace, and microscopically an occasional white blood cell. On discharge, administration of calcium lactate, 5 grains three times daily, and a low phosphorus diet controlled the episodes of hyperventilation and carpopedal spasm fairly well.

For the first time rather severe hypertension was present when she was examined in April 1961. The blood pressure was 160/100 mm. Hg. Her weight was 32 pounds and the height was 37 3/4 inches, showing little evidence of linear growth during the past year. Some pretibial edema and edema of the abdominal wall were also present. The elevated blood pressure continued, and on May 23 she was hospitalized with congestive heart failure. At that time the liver was enlarged 4 fingerbreadths beneath the costal margin, pulmonary edema was pronounced, and the heart was grossly enlarged. The blood urea nitrogen was 122 mg. per hundred milliliters, calcium 9.5 mg., phosphorus 3.1 mg., carbon dioxide combining power 24 mEq., hemoglobin determination 7.3 Gm., hematocrit reading 21, red blood cell count 2.2 million, and white blood cell count 10,500 with segmented forms 53, stab forms 6 and lymphocytes 39 per cent. The patient responded well to treatment with Apresoline and reserpine intramuscularly and digitalization, and was discharged on maintenance therapy of digitoxin and reserpine by mouth.

Because of severe hypertension, she was hospitalized at Baptist Memorial Hospital from June 12 to July 3. Her weight at this time was 32 pounds, and the blood pressure was 160/120 mm. Hg. Treatment with Apresoline and reserpine intramuscularly controlled the hypertension fairly well. From July 3 to 20 many investigative studies on her blood and urinary amino acids were carried out at the National Institutes of Health, Bethesda, Md., where it was reported that she "had classic cystinosis and demonstrated very large quantities of crystals in the cornea." The alpha amino nitrogen excretion averaged 5.9 mg./Kg./24 hrs., which was considered upper normal for her by the method used. The urinary amino acid chromatogram showed methionine, alanine, threonine, glutamine, glycine and lysine. It was presumed that the amino acid excretion was probably higher prior to the severe renal failure. The total urinary organic acid excretion averaged 8.0 equivalents in 24 hours per kilogram.[20]

Ten days after her return to Jacksonville on July 20, she was hospitalized at Baptist Memorial Hospital because of dyspnea and two days later was transferred to Hope Haven Hospital. Because of severe anemia she received 125 cc. of packed red blood cells; the blood pressure then rose, and she had convulsions. Pulmonary rales and enlargement of the liver developed. Despite

digitalization and intensive treatment with antihypertensive drugs, she died on August 5 in congestive heart failure.

At autopsy, performed by Dr. Alvin G. Foraker, the primary causes of death were listed as cystinosis, uremia, congestive heart failure, and increased intracranial pressure with accessory findings of congestion of viscera, hematomas of the cubital areas and buttocks, anemia, and subnormal development. Microscopic findings were foci of yellowish brown crystalline material in the thymus, areas of essentially similar deposits in the dermis and hypoderm, discrete areas of crystalline mass deposition in the heart, and masses of yellowish brown crystalline material deposited in the tubules of the kidneys, occurring in clumps in the spleen, and discretely distributed throughout the parenchyma of the liver.

Comment

In previously reported cases it was suggested that the ocular deposits diminished with vitamin E therapy.[21] This result, however, was not obtained in this case.

In the opinion of some workers, the disorder in cystinosis is the inadequate function of cystine reductase in converting cystine to cysteine. Since cystine reductase can apparently be isolated from brewer's yeast and other substances, it was possible to obtain a supply of the enzyme for topical application in the eye. No perceptible change resulted from this therapy.

In the search for another approach to management, the administration of progesterone for a period of several months was suggested. This therapy was based on the possible effect of progesterone in enhancing the coenzyme activity of many enzyme systems.

Cystine storage could result from a block anywhere in the metabolism of sulfur-containing amino acids. The insoluble disulfide cystine must be reduced to the more soluble sulfhydryl containing cysteine before it normally enters the metabolic pathway of the sulfur amino acids. Potassium sulfocyanide is a metabolic end product of cystine metabolisms. This product is found in the secretion of the parotid gland. Since hydrocyanic acid is present in saliva, it is attractive to think that the reducing substance may account for the absence of cystine crystals in the buccal mucosa, whereas the crystals were found in abundance in other mucous membrances.

At the National Institutes of Health, the erythrocytes and liver of our patient were studied for cystine reductase and gave values similar to the control. Cystine transhydrogenase, which catalyzes the reduction cystine in the presence of reduced glutathione, was present in the washed erythrocytes and liver in quantities comparable to control levels. Glutathione reductase activity was also present in the liver, and the patient's plasma did not enhance oxidation of sulfhydryl groups at a greater than normal rate. The whole blood, liver and kidney were studied for increased quantities of metals of all types, but no increased levels were found. "Our current thoughts are that this disease represents primarily a metabolic defect which leads to the accumulation of cystine, a very insoluble disulfide. We would then think that the renal effects are secondary to this accumulation of cystine. Certain enzyme systems require free sulfhydryl groups and might well be inhibited by an excess of cystine."[20]

In the staining of specimens it is important that they not be fixed in formalin as it destroys the crystals. They must be immediately fixed in absolute alcohol and later subjected to a rapid staining technique in order to demonstrate the crystals in abundance. The tissues must be stained with eosin.

The characteristic appearance and distribution of crystals in the cornea are pathognomonic of cystinosis.[22] In all cases coming to the attention of the ophthalmologist in which unusual renal disease in children is associated with retarded growth, the importance of slit lamp examination cannot be overemphasized.

Summary

A classic case of cystinosis with autopsy findings is reported. The importance of an ophthalmological examination in the diagnosis of this rare disease of children is pointed out, as the biomicroscopic findings of glistening silvery corneal cystine crystals is pathognomonic. The pathogenesis and clinical course of the disease are discussed.

References are available from the authors upon request.

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Chemosurgery of the Face Some Warnings and Misconceptions

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Having used chemosurgery of the face for two years as an active part of our plastic surgical practice, and having previously reported on the subject,[1,2] we believe that certain factors have not been stressed enough in these early publications. Admittedly, chemosurgery is a controversial subject at this time and even those performing the procedure fail to agree among themselves regarding technique and indications. This lack of agreement, however, is not unusual in any new method which evolves in medicine.

One of the chief reasons that chemosurgery has received some bad publicity and has cast doubt in the minds of physicians as to its value is that early in its development much of the "face peeling" was done by lay operators. This practice is true of many phases in the history of medicine. It has been only in recent years that the obstetrician has replaced the midwife, and to this day in many areas of the United States licensed midwives still practice their method of the healing art.

In performing chemosurgery, we are dealing with a group of patients, principally women, who in their search for facial rejuvenation will go to all extremes and submit to all forms of treatment in an attempt to look more youthful. One can readily see why fly-by-night operators, both lay and professional, are able to induce these patients to have "rejuvenation treatments." The setup is next to perfect for the unscrupulous person. He is dealing with a patient who wants something desperately—youth. She is in the stage of life where she can usually afford the treatment, regardless of the expense, and she is often willing to try even the most bizarre treatment because she will believe almost anything she is told. Also, if the result is not good, or even if her appearance is made worse, she is afraid to say anything because of the embarrassment of having friends know that she sought such treatments in the first place. The medical profession, therefore, has a tremendous handicap in that we refuse to police adequately our own ranks, much less those who are lay operators.

We all have followed the evolution of quackery and unethical medical cults, particularly in California where there have been repeated episodes in dealing with these problems. Florida, although somewhat lax in its restrictions on allied healing arts, has recently awakened and taken some steps forward in attempting to restrict "face peeling parlors." In Miami recently one such operator and her husband were arrested for practicing medicine without a license. What the ruling of the court will be, however, in this and related cases remains to be seen.

The problem of the physician who may try this procedure without proper background, or even someone who may be interested in the patient only from a financial standpoint, is probably equally as serious as that of the lay operator, or possibly even more so because of the position of trust and responsibility the physician holds. We have recently seen in our practice patients who have been treated here in the state by a method which has been explained to them as "face peeling," wherein a solution painted on the face, often by a person other than a physician under the physician's direction, results in only slight erythema of the skin and nothing more. After this clears, the wrinkles are still present, and as a result these patients are unhappy, some believing that they are actually worse as a result of the treatment. Here is the age-old problem of a patient being promised something which cannot be given. Consequently, a procedure which seems to offer promise when properly performed is placed in a dubious status even before it can

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Fig. 1.—Pretreatment appearance of a 50 year old woman who has principally a problem with fine wrinkles in the skin. A generalized facial sagging is not present, and therefore she is one of a small percentage of patients who benefits from a chemical face peel alone.



Fig. 2.—Appearance five months following treatment. The patient has on no make-up.

be properly investigated and evaluated by competent physicians.

Most of us have recently read of an organization for face peeling which was set up in Connecticut and received national publicity in Look Magazine. The following week we then read in Time Magazine that the clinic was closed down. Now it is rumored that the same persons are attempting to set up an assembly line production for face peeling in Florida. It is our belief that such assembly line production methods and fly-by-night operations are not an asset to medicine, but rather tend to discredit all cosmetic surgery. New medical and surgical procedures which are given premature national publicity often convey to prospective patients that a new miraculous method has been found which is a panacea for all their problems. It is this mass psychology that the unscrupulous "face peeler" uses.

Evaluation

Chemosurgery is new to most physicians. Plastic surgeons and dermatologists see most of the patients seeking facial rejuvenation, and many within these specialties have read and listened, awaiting more evaluation of final results of the chemical procedure before embarking upon it themselves. Even after using it for two years in over 70 clinical trials, we have not conclusively determined that it is a completely safe procedure or that its long term follow-up will be satisfactory. Obviously, any procedure which has been followed for only a short period of time cannot be finally evaluated. These facts must be carefully explained to patients who are considering such a procedure.

The chemical process is not a replacement for surgical facelifting but usually an adjunct to it.



Fig. 3. — Lateral view of a patient who has generalized sagging of the face. Correcting the fine wrinkles alone would give only a smooth skin on a sagging face. This patient is representative of the usual case in which both a surgical facelift and chemical face peel are needed.



Fig. 4.—Result four months following treatment. The generalized sagging has been corrected surgically, and the many fine wrinkles have been removed by chemical face peeling. The patient wears no make-up other than lipstick.

In restoring an aging face to a more youthful appearance there are two basic problems: (1) the generalized sagging of the skin, subcutaneous tissue and muscles; and (2) the fine wrinkles in the skin itself. About 80 per cent of all patients presenting themselves for facial rejuvenation need both procedures. It is the 20 per cent who need only the face peel that supply the lay operators and physicians who perform no surgery with their most dramatic results. The person depicted in figure 1 does not have the generalized sagging of the face and is one of a small group who benefits from the peeling process alone. The post-treatment photograph (fig. 2) shows the dramatic improvement with only chemosurgery. Patients such as this are few, with the majority being similar to the patient in figure 3. Here we see that the generalized sagging of the face cannot possibly be "lifted" by chemosurgery. This patient needs a rhytidectomy (surgical facelift) as well as the peeling process. Unfortunately, it is this type of case that frequently falls into the hands of an unqualified person who promises everything and actually delivers very little. Consequently, the procedure acquires a bad name because it has been employed in an erroneous manner.

We do not mean to imply in any way that the dermatologist should not perform face peeling, or that the plastic surgeon is the only one qualified. Such is certainly not the case. We merely wish to stress that a number of patients need only a surgical facelift, others may need a surgical lift combined with a chemical face peel, and a small fraction need only chemosurgery. It makes no difference who performs the face-peeling procedure so long as it is done correctly and the patient understands fully about the anticipated results for which no guarantee can positively be given.

Summary

Chemosurgery and chemical face peeling are terms which are familiar to all of us, and we should have some basic knowledge of the process in order to explain it fully to our inquisitive patients.

We must be constantly on the alert for unscrupulous persons, either lay or professional, who may be inclined to take advantage of patients seeking the surgical or chemical "fountain of youth."

Chemosurgery is not an assembly line technique, and in our opinion should be performed on hospitalized patients under close observation by a physician who is experienced in the use of the chemical agents employed.

Chemosurgery is new to most of us and must be further evaluated, particularly the status of long term results, before positive conclusions can be reached as to its effectiveness.

Chemosurgery is not a replacement or substitute for surgical facelifting, but if indicated is usually an adjunct to the surgery.

About 80 per cent of patients presenting themselves for facial rejuvenation are not candidates for the chemical process solely, but need certain surgical procedures in addition. It is the unusual patient who needs only chemosurgery.

A plea is made for practicing physicians to investigate carefully clinics and individuals who are performing chemosurgery and to be aware of the situation as it actually exists. Let us not be afraid to evaluate critically and investigate a process such as chemosurgery which is foreign to most of us.

References

1. Baker, T. J.: The Ablation of Rhitides by Chemical Means. A Preliminary Report, J. Florida M. A. 47:451-454 (Nov.) 1961.
2. Baker, T. J.: Chemical Face Peeling and Rhytidectomy. A Combined Approach for Facial Rejuvenation, Plast. & Reconstruct. Surg. 29:199-207 (Feb.) 1962.

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Recent Clinical Studies from Bowman Gray School of Medicine

Medicine

Carmichael, A. H.; Blake, D. D., and Felts, J. H.: Intrathoracic Manifestations of Malignant Lymphomatous Disease, Dis. Chest 38:630-637 (Dec.) 1960.

In 100 random pathologically proved cases of malignant lymphoma, 54 presented evidence of intrathoracic disease. Lack of symptoms or signs referable to these lesions was striking. The most frequent radiographic finding was hilar adenopathy and when associated with paratracheal nodal enlargement was most suggestive of final diagnosis. Parenchymal and pulmonary lesions were nonspecific in appearance. Eosinophilia when present usually indicated the presence of intrathoracic disease.

Felts, J. H.: The Use of the Artifical Kidney in Poisonings, North Carolina. M. J. 21:490-492 (Nov.) 1960.

A brief review of the place of hemodialysis in the treatment of poisonings is presented. It is pointed out that hemodialysis is not a substitute for, but rather a logical addition to, proper medical management of a variety of toxic states produced by exogenous poisons.

Hayes, D. M.; Spurr, C. L.; Felts, J. H., and Miller, E. C., Jr.: Von Recklinghausen's Disease with Massive Intra-Abdominal Tumor and Spontaneous Hypoglycemia: Metabolic Studies Before and After Perfusion of Abdominal Cavity with Nitrogen Mustard, Metabolism 10:183-199 (Mar.) 1961.

Less than 30 cases of hypoglycemia caused by extrapancreatic, non-islet cell tumors have been reported. The patient studied had a large intrahepatic neurofibroma. Intravenous glucose tolerance before and after insulin, glucagon and adrenocorticotrophin were determined and the effects of these agents on circulating insulin activity in organic phosphorus, lactic acid and free fatty acids measured. Response to a test meal of L-leucine was not unusual and permitted exclusion of leucine sensitivity as a cause of hypoglycemia. Studies on the etiology of the hypoglycemia were reviewed, and it was considered that high carbohydrate consumption by the tumor, the secretion of insulin or insulin-like materials by the tumor, or the elaboration of an amino acid or similar substance which might cause hypoglycemia should be considered in future studies of this condition. In the case reported, the condition was well controlled with small doses of triamcinolone.

Johnson, W. M.: Medical Management of Older Patients, J. A. M. A. 175:649-653 (Feb. 25) 1961.

The long term management of the older patient is to be distinguished from the treatment of acute illness. The first interview must help to establish a satisfactory long term relationship between patient and physician. The physical examination must be systematic and complete, but thoroughness should take into account the patient's life-long habits, and in cases where treatment is only palliative, a careful choice of words often brings about acceptance of the situation. Prophylactic geriatrics seeks to prevent, postpone, or prepare for the infirmities of old age. The family doctor can help both his youngest and his oldest patients by leading the family to appreciate their need of a recognized place in the community.

Miller, E. C., Jr., and Roller, G. W.: Fashions in Medicine: Diabetes, 1961, M. Times 89:196-200 (Feb.) 1961.

The authors consider that four out of every five diabetic patients are more than 20 pounds over the ideal weight and that the great majority of these should be treated by weight reduction alone. Of the remaining 20 per cent of diabetic patients, acidosis develops readily in half when insulin is withdrawn. These include juveniles and older diabetic patients whose diabetes is labile and difficult to regulate. In the remaining 10 per cent acidosis does not develop readily, but despite careful adherence to diet, these patients continue to have hypoglycemia and glycosuria. Oral hypoglycemic agents have much to offer the last group. Of the three currently available agents, tolbutamide (Orinase), chlorpropamide (Diabinese) and phenformin (DBI), the authors think that tolbutamide should be used initially and if this is unsuccessful, then phenformin. They believe that chlorpropamide should not be used because with it there is a greater danger of severe hypoglycemia and a greater possibility of jaundice than is seen with the other agents. Phenformin may show a greater instance of the side effects of nausea, vomiting and epigastric pain, but may be effective in some patients in whom tolbutamide does not suffice.

Spurr, C. L., and Hayes, D. M.: Clinical Observations on Newer Chemotherapeutic Agents. South. M. J. 53:1005-1014 (Aug.) 1960.

Since nitrogen mustard has proved not to be a curative agent for cancer, research has proceeded in an attempt to modify this agent in the hope of producing more effective analogs. Two such agents, uracil mustard and cyclophosphamide, were tried on 18 and 16 patients respectively. The former showed encouraging activity against a number of lymphomas and was possibly of help in multiple myeloma. The toxic dose of this agent lies near 6 mg. daily for adults. The latter compound appears to have antitumor activity in some patients, but the agent was not strikingly effective against acute leukemia. Side effects of the agent included gastrointestinal disturbances, leukopenia and thrombopenia.

Whitley, J. E.; Witcofski, R. L., and Meschan, I.: Experimental Comparison of Ortho-iodohippuric Acid and Iodopyracet in Renal Function Evaluation, Radiology 76:464-466 (Mar.) 1961.

Iodopyracet-I^{131} injected into dogs showed a greater specificity for renal excretion than did iodohippuric acid-I^{131}. This compound appears, therefore, to possess properties which may make it useful for the evaluation of renal function by the external radiorenogram technique.

Obstetrics and Gynecology

Burt, R. L., Etiology of Pre-Eclampsia Eclampsia, Am. Heart J. 61:710-711 (May) 1961.

This editorial constitutes a brief review of studies bearing on the etiology of eclampsia.

Burt, R. L.: Management of Eclampsia, Am. J. Obst. & Gynec. 81:1266-1270 (June) 1961.

This is a clinical discussion of the management of the patient with eclampsia. It is pointed out that, as with all conditions, treatment must be individualized but that termination of pregnancy following acute aspects of eclampsia is imperative.

Greiss, F. C., and Lock, F. R.: Cervical Carcinoma—The Use and Abuse of Diagnostic Methods, North Carolina M. J. 21:164-167 (Apr.) 1961.

On occasion it is expedient that medical progress be reviewed and interpreted in its proper perspective. This is true of the Papanicolaou smear and cervical conization, since improved diagnosis of cervical carcinoma by the proper application of new methods may be negated by their improper use. Annual physical examination including a complete pelvic examination and cervical cytology examination must be encouraged. Due thought must be given to the timing, site, and preservation of cervical smears. Cytologic diagnoses must be

interpreted in the light of the natural history of the underlying disease process. Simple hysterectomy performed as definitive surgery for an isolated positive cervical smear or for preinvasive carcinoma diagnosed only by punch biopsy is blind treatment and may well terminate in disaster. Similarly, conization of the cervix may compromise further treatment when punch biopsy is adequate for definitive diagnosis. It is hoped that these comments will clarify thinking in one area of cancer diagnosis so that maximum benefit to the patient may be realized.

Lock, F. R.; Gatling, H. B.; Mauzy, C. H., and Wells, H. B.: Incidence of Anomalous Development Following Maternal Rubella. Effect of Clinical Infection or Exposure and Treatment with Gamma Globulin, Am. J. Obst. & Gynec. 81:451-464 (Mar.) 1961.

An epidemiologic survey of this problem in North Carolina is reported. Again it was observed that when rubella occurs in the first trimester of pregnancy, the incidence of fetal anomalies is significantly higher than the incidence in control siblings. Frequency and severity of anomalies decreased inversely with the gestational age at the time of infection. The first four weeks were shown to be critical with a 50 per cent incidence of serious anomalies in this series. Serious anomalies occurred in less than 15 per cent with gestational ages of five to 13 weeks and none thereafter. Fetal abnormalities characteristic of rubella syndrome were not found in the absence of overt disease. It was not possible to evaluate the effect of gamma globulin for prophylaxis.

Lock, F. R.; Greiss, F. C., and Blake, D. D.: Stage I Carcinoma of the Uterine Cervex; Comparison of Results with Variations in Treatment, Am. J. Obst. & Gynec. 80:984-996 (Nov.) 1960.

Optimal dosage levels of pelvic radiation as described by Nolan and Garcia may be supplemented by radical hysterectomy and pelvic lymphadenectomy for the treatment of Stage I cervical carcinoma without a prohibitive increase in complications. This combination yielded an increase in survival rate from 68.5 per cent with radiation therapy alone to 86 per cent.

Intensive pelvic radiation probably does not improve survival in patients with cervical carcinoma. Moreover, the incidence of radiation complications is unduly high. The high incidence of pelvic necrosis following subsequent radical operation is prohibitive. Primary radical operation in selected patients yields excellent results.

Earlier diagnosis within Stage I improves survival with cancer of the cervix, but even the earliest of invasive lesions must be treated as though metastases had already occurred. Therapy must be individualized for every woman with cervical carcinoma to obtain maximal survival with a minimum of complications. Treatment must be flexible enough to meet unforeseen problems. Therapy must be planned so that avenues of treatment for recurrent disease are not closed.

Whitley, J. E.; Blake, D. D.; Witcofski, R. L., and Meschan, I.: The Use of a Vaginal Applicator as an Adjunct to the Treatment of Carcinoma of the Cervix, Am. J. Roentgenol. 85:29-32 (Jan.) 1961.

A description of an aluminum "broomstick" vaginal applicator for use in the treatment of vaginal extension of carcinoma of the cervix is given. Indications and techniques for its use are discussed.

Pediatrics

Cramblett, H. G.: Croup—Present Day Concept, Pediatrics 25:1071-1076 (June) 1960.

An etiological classification of croup is presented, and the factors predisposing to the disease are elucidated. Virologic studies are reviewed, and it is pointed out that three viruses have already been demonstrated as etiologic agents while four others have been incriminated. Therapy is reviewed and it is pointed out that sedation, high humidity, hydration and subemetic doses of syrup of ipecac are the key-

stones of therapy. Because of the low incidence of bacterial infection as a cause of croup, considerable circumspection must be exercised in the use of antibiotics. The need for tracheotomy depends on individual circumstances.

Cramblett, H. G., and Fomon, S. J.: Unpredictability of Antibody Response of Infants to Injections of Salk Poliomyelitis Vaccine, J. Pediat. 58:779-784 (June) 1961.

Salk vaccine was administered to two groups of infants and the antibody response evaluated. Group A received injections at 10, 14, 40 and 60 weeks and had serum titers of neutralizing antibodies of 1:4 or greater one month after the first injection. Infants in Group B received injections at 6, 10, 14 and 40 weeks. Three of the 13 in this group had titers of neutralizing antibodies of less than 1:4 against one or more of the three types of poliovirus one month after the fourth inoculation. A titer of passively transferred neutralizing antibodies of 1:16 or greater at the time of the initial inoculation seemed to interfere with the response to active immunization.

Weihl, C.; Cornfeld, D.; Riley, H. D.; Huang, N., and Cramblett, H.: Purified Poliomyelitis Vaccine—Clinical Appraisal, J. A. M. A. 176:409-412 (May 6) 1961.

This is a report of a combined study with Dr. Cramblett from this institution participating. It was concluded that with proper amounts of purified vaccine given immunity against all three poliovirus types can be achieved in nearly all seronegative persons after two doses of the vaccine administered one month apart. The purification process employed effectively excluded all serologically detectable monkey-kidney antigen and virtually all other non-viral contaminating materials present in crude Salk vaccine.

Surgery

Alexander, E., Jr.; Myers, R. T., and Davis, C. H., Jr.: Run-over (Überfahren) Accidents, North Carolina M. J. 22:47-54 (Feb.) 1961.

A review of the English, German, French, Dutch, and Italian literature has been made of run-over or überfahren accidents.
Eleven cases are presented with illustrations. The head, even that of a small child, may be run over by a slowly moving wheel of a modern automobile, leaving tire tread marks but exerting relatively mild damage of a permanent nature in some instances. When the thorax or abdomen is similarly compressed, a most interesting syndrome of congestion of the small vessels of the head and neck may result. The brain in such cases is usually spared.

Boyce, W. H., and Bradshaw, H. H.: Differentiation of Hyperparathyroidism and Other Diseases Associated with Recurrent Urinary Calculi: A Clinical Evaluation of Some Currently Available Laboratory Methods, Tr. Am. A. Genito-Urin. Surgeons 52:77-86, 1960.

Ninety patients with recurring renal calculous disease were studied. Eleven patients were found to have primary hyperparathyroidism, 14 to have various metabolic or degenerative disorders, 22 to have idiopathic hypercalcinuria and the rest to have chronic urinary tract infection. Proteus was the bacterium most commonly cultured although when combined, the coliform-aerobacter group of organisms was frequently cultured.
The intravenous calcium load test for tubular reabsorption of filtered phosphate, urinary calcium excretion and peripheral blood levels of calcium and phosphorus must be carefully evaluated by the physician in making the diagnosis and separating hyperparathyroidism from other causes of recurrent renal calculi.

Boyce, W. H., and Edwards, C. N.: Factors Relevant to Chronic and Recurrent Infections of the Urinary System, J. Urol. 83:749-754 (May) 1960.

In light of current concepts of renal physiology, pathology and bacteriology the term pyelonephritis is considered to have become quite as nonspecific as "Bright's Disease." The ecology of the disease is reviewed and pathways for further evaluation pointed out.

Carlson, K. P.; Bates, H. B., and Boyce, W. H.: Death Due to Parathyroid Crisis, J. Urol. 84:219-222 (Aug.) 1960.

A case of mortal parathyroid crisis is reported. The nature of this syndrome is reviewed and a plea made for prompt surgical intervention. If other surgery is contemplated, it should be deferred until the etiology of the presenting hypercalcemia is determined.

Cordell, A. R.; Wright, R. H., and Johnston, F. R.: Gastrointestinal Hemorrhage After Abdominal Aortic Operations, Surgery 48:997-1005 (Dec.) 1960.

Fistulization between the intestinal tract and abdominal aortic prosthesis is a common cause of late graft failure and usually occurs at suture lines which are contiguous with bowel loops. Fistulization can occur with any type of prosthesis and even after endarterectomy. Any massive gastrointestinal hemorrhage after an abdominal aortic operation should be considered of aortic origin until proved otherwise. Prompt suspicion of diagnosis and early surgical intervention are required if patients with such fistulas are to be saved.

Possible means of preventing the fistulas include selection of manufactured prostheses rather than homografts, meticulous suture technique, peritonealization of suture lines and prosthesis if possible, interposition of living tissue between bowel loops and grafts, and keeping size discrepancy of host to graft at a minimum.

Forsyth, H. F.: Neck Injuries in Children. Read before the Section on Orthopaedics and Traumatology, Medical Society of the State of North Carolina, Raleigh, May 11, 1960.

A brief review of the cervical spine injuries in children treated at the North Carolina Baptist Hospital during the past 12 years indicates that serious damage occurs infrequently in children as compared with the same injuries in adults. It also points out that the upper three cervical vertebrae were much more frequently involved than the lower ones, and in general there was a greater tendency to dislocation than to fracture. Congenital anomalies were mentioned as a possible complicating factor in injury as well as an important factor to be remembered in roentgen diagnosis and treatment.

Garvey, F. K., and Murray, H. L.: A Clinical Report on the Use of Combined Mandelamine and Thiosulfil in Resistant Urinary Tract Infections, North Carolina M. J. 22:203-206 (May) 1961.

Twenty-five patients with a persistent urinary tract infection were treated with a combination of Mandelamine and Thiosulfil, a soluble sulfonamide. Twenty-one of 25 patients improved on this therapy, duration of which varied from two weeks to six months. It was concluded that this preparation is of value in long term suppressive therapy of chronic urinary tract infections.

Prichard, R. W., and Bradshaw, H. H.: Primary Lymphoid Tumors of the Lung, Arch. Path. 71:420-428 (Apr.) 1961.

Seven patients with lymphoid tumors appearing primarily in the lung are presented. One patient had a few small lymph-node-like masses which were considered hamartomas. Another had a small focus of Hodgkin's granuloma and died six and one-half years after operation of unrelated disease, with no evidence of tumor. Five patients had lymphocytic lymphosarcoma. One died in the postoperative period. Another died 21 months after operation with proved extension of the disease. Radiologic evidence of disease has been found 32 months after operation in one patient. Only two patients are both alive and without evidence of further tumorous involvement; one of them has remained well for 29 months, the other seven years, after operation.

These patients are considered to provide additional evidence supporting the view that the prognosis of malignant lymphoid tumors which present primarily in the lung is different, and generally better, than histologically similar tumors arising primarily in lymph nodes. None of the findings in these patients suggest a means of accurate prognosis regarding future spread of the tumor.

ROBERTS, R. W.: TONOGRAPHY IN THE MANAGEMENT OF GLAUCOMA, TR. AM. ACAD. OPHTH. 65:163-170 (Mar.-Apr.) 1961.

It would certainly seem reasonable that the management of glaucoma can be achieved on a more logical basis if the status of the facility of aqueous outflow is known both before and during therapy. Tonography gives this information for the first time, and by evaluation of tonographic data one should be able to assess the adequacy of medical therapy in simple glaucoma better and earlier than has been possible heretofore. In closed angle glaucoma it should make possible more accurate selection of the appropriate operation for each individual case.

ROGERS, J. W., AND ROBERTS, W.: SCLERAL RIGIDITY DETERMINATIONS BEFORE AND AFTER TONOGRAPHY, AM. J. OPHTH. 51:150-152 (Jan.) 1961.

Based on the present study, it is concluded that there is no significant change in scleral rigidity as a result of tonography.

SHAFFNER, L.: DIAGNOSIS AND TREATMENT OF INTUSSUSCEPTION IN INFANTS AND CHILDREN, NORTH CAROLINA M. J. 21:318-322 (Aug.) 1960.

Intussusception should be suspected in any infant with a history of the sudden onset of small bowel obstruction. A satisfactory examination of the "acute abdomen" in an infant requires a modification of the order and manner of examination usually used in adults. The infant must be quiet and relaxed. Ravitch's method, if only an attempt at reduction by barium enema under hydrostatic pressure, has led to earlier diagnosis, successful treatment in three out of four cases, and a reduction in over-all morbidity.

Twenty-two cases are analyzed. Three of 11 intussusceptions were reduced by barium enema without operation. Out of 15 operative cases there was one death, that attributable to a delay in diagnosis which could have been reached sooner if a barium enema had been done when first indicated. A barium enema in all suspected cases can lead not only to an earlier diagnosis, but also to an easier and simpler cure.

WRAY, J. B., AND DAVIS, C. H.: THE MANAGEMENT OF SKELETAL FRACTURES IN THE PATIENT WITH A HEAD INJURY, SOUTH. M. J. 53:748-753 (June) 1960.

Injuries affecting the vascular or respiratory system and other vital organs take precedence over the management of injuries of the musculoskeletal system. A thorough examination of the unconscious patient is imperative. Stability of vital signs is essential to permit any treatment of musculoskeletal injuries. More involved care must await solution of vital organ problems.

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President's Page

Americanism and the Doctor

In recent years the expressions, "American Way of Life," "American Heritage," and "Americanism," have been used in so many different contexts and to indicate so many different ideas that they have almost lost their meaning. Any speaker who wants to prove his point merely has to claim that his is the "American" way just to establish its validity. What does "Americanism" mean? What *is* the American way of life? I suppose that one could get as many answers as there were answerers and, like most people, I have my own ideas on the subject.

To me "Americanism" means several things:

It means majority rule, while protecting the rights and opinions of the minority and of the individual.

It means placing the highest value on the worth of the individual and the individual personality.

It means affording equal opportunity of all its citizenry to better themselves through dint of effort and hard work.

It means a feeling of responsibility by the fortunate for the less fortunate. In short, it means individual freedom coupled with individual responsibility.

I know of no better example of Americanism at its best than the practice of medicine as it is found in this country. Basically, doctors are responsible citizens. Not only do they contribute of time and substance to various eleemosynary and worthy causes, as do bankers, business men and other citizens, but they are unique in their contribution to the community in providing free professional services to the indigent and near indigent. By adjusting fees for services to patients' income levels, doctors show due regard for the less fortunate. Apply these criteria as you will and you will find that doctors in general measure up to their responsibilities as citizens as well, or better than, any other professional or occupational group.

But—we do not have much to toss our hats about. The cancer of socialism which has been slowly but surely metastasizing to all segments of our society rarely elicits a response from doctors unless doctor interests are directly involved. A congressman commented to me that doctors, who are militantly opposed to socialized medicine, had shown little interest in the recently defeated farm bill, which was a much more socialistic proposal than the King-Anderson Bill. To paraphrase Mr. Lincoln, no society can long exist half-socialized and half-free. Whenever any part of our society loses its freedom, a little bit of freedom is lost by everyone. Until doctors interest themselves in the fight against socialized banking, socialized farming, socialized education, socialized housing, and all other facets of socialization, the medical profession has little chance long to retain its own freedom. We have the obligation to our children and to future generations of doctors to preserve for them not only the best of medicine but the best of America that exists today. This we cannot do unless we act as responsible citizens, as Americans, in not only preserving our own liberty but in helping to preserve that of anyone else who is threatened.

Robert E. Zellner



Editorials

Cystinosis. Cystinuria. and the Fanconi Syndrome

Elsewhere in this issue of The Journal is an article entitled "Cystinosis: Recent Clinical Observation with Case Report" by W. Jerome Knauer Sr., M.D., and Capt. Norris L. Newton, MC, USAF.

Cystinosis represents one of the many "inborn errors of metabolism," has an incidence of approximately one in forty thousand in the general population, and is probably transmitted as a simple recessive mendelian character (Harrison). The entity is most likely a generalized metabolic disturbance which leads to the accumulation and precipitation of cystine in tissues throughout the body. There is renal dysfunction, which may be secondary to the nephrotoxic properties of cystine, and the disorder is usually classified among the often confusing group of hereditary renal tubular defects. Cystinosis is known in the literature often as Abderhalden-Kaufman disease, Lignac-Fanconi disease, or de Toni-Fanconi-Debré syndrome with cystinosis.

It should be noted that "Fanconi syndrome" may be applied to a variety of diseases, both congenital and acquired, that produce the triad of renal tubular defects (renal glycosuria, aminoaciduria, and phosphaturia) and resultant chronic acidosis, growth failure, and usually rickets. The Fanconi syndrome may be seen not only in cystinosis, but also with heavy metal toxicity (uranium, cadmium, or lead), in Wilson's disease, multiple myeloma, and disease of unknown pathogenicity (Harrison).

Cystinuria is an unrelated genetic renal defect often confused with cystinosis. With cystinuria tubular reabsorption of cystine, lysine, arginine, and ornithine is limited and there are excessive amounts of these amino acids in the urine. In cystinuria calculi form in the urinary tract, but there are no skeletal or other systemic changes of cystinosis. Patients with cystinosis do not have cystine calculi.

Although cystinosis is an uncommon disease with usually a poor prognosis and no satisfactory therapy for all patients, early diagnosis is important both to the patient and parents. Cystinosis should be suspected by the physician when he is confronted with the infant who has "failed to thrive." In the acute form the patient is usually under one year of age and has a history of recurrent fever, vomiting, anorexia, polydipsia, dehydration, and unusual toxicity to mild infections. In the more chronic form, usually encountered in the child of age two or three years, the patient has dwarfism, photophobia, and rachitic deformities despite usually adequate vitamin D intake.

The patient with cystinosis usually is small, chronically ill, weak, and lethargic. Hepatomegaly may be present. If the diagnosis is suspected, one may demonstrate the minute white crystals in the cornea with a standard ophthalmoscope at a +40 dioptre lens (Fraser and Salter). Routine urinalysis may show a variable pH, often a low specific gravity, albuminuria, glycosuria, and frequently pyuria. Radiographically there may be changes of osteoporosis or rickets.

Confirmatory diagnosis may be obtained by: (a) urinary amino acid paper chromatography; (b) urine and serum potassium, phosphorus, and acid-base determinations; and (c) demonstration of cystine crystals in the cornea (by slit lamp

microscopy and/or conjunctival scrapings), bone marrow, or lymph node.

Therapy consists of potassium containing alkalinizing solutions to correct the usual hypokalemic metabolic acidosis and large amounts of vitamin D to improve the rachitic lesions. The course of the average patient with cystinosis is progressive renal and hepatic dysfunction with intercurrent infections and ultimate death in uremia.

The well written article in this issue presents a concise description of the pathogenesis of cystinosis and the report of an interesting case with growth retardation noted at age nine months and expiration at age eight years despite careful medical supervision. The bibliography affords the reader references of historical, research, and clinical interest.

It is hoped that the article will stimulate physicians to diagnose cystinosis and that a better treatment may evolve in the future.

Allen N. Jelks, M.D.
Sarasota

Facial Chemosurgery

Chemosurgery as applied to facial wrinkling and surface irregularities has been practiced for several years, mostly at the hands of lay operators, but it is only recently that controlled investigation into its use has been undertaken by the medical profession. A great deal of the published pioneer work has been performed by Dr. Thomas J. Baker of Miami, and the current issue of The Journal carries his most recent article, written in cooperation with Dr. Howard L. Gordon.

The technique of chemosurgery has been severely criticized, both inside and outside the medical profession. Much of this criticism has been justified, based as it was on the hazards and complications which arose when this method of treatment was handled by the lay operators.

In the current article, Drs. Baker and Gordon show they are well aware of these problems and endeavor to point out the pitfalls which can be encountered by the inexperienced physician utilizing this form of therapy. This reviewer has seen patients who have been treated by this method, and there is little doubt that in selected cases, the results are nothing short of dramatic. As rightly emphasized in the article, however, its advantages are greatest when it is used as an adjunct to the established surgical operations utilized in the treatment of rhytidectomy. When utilized in carefully selected patients by those well versed in the technique, it will find a permanent place in the armamentarium of the physicians who fight against the ravages of the aging process.

Bernard L. Morgan, M.D.
Jacksonville

Medical Talent Recruitment

The medical profession stands at a very critical point in maintaining the high standards of selection in the present day competition for talent. John W. Gardner, President of Carnegie Corporation, has commented on the growing demand in our society for scientific manpower, ". . . one of the distinguishing marks of a modern complex society is its insatiable appetite for educated talent."

The characteristics needed for a good physician are character, motivation, and intelligence. The first two are difficult to measure scientifically; however, intuitively, those characteristics have not changed in recent medical school classes. The consensus among faculties indicates the group immediately past was the best. Studies by the American Association of Medical Colleges show there has been no significant change in intelligence of the applicants as measured by the Medical College Admission Test Score. The average scores show a slight rise in Quantitative Ability and Science Achievement during the last few years; however, this increase is also shared with the rejected students and may reflect a change in preprofessional training. The pattern of constancy gives confidence that the basic intelligence as measured by this test shows no change in quality of the students' intelligence, although there is a general feeling that the college grades of the premedical student are not as good as in years past.

There has been some decline in quantity of applicants despite increased numbers of positions. The ratio of applicants to applicants accepted is below 2/1. The outlook, however, is not too bad. The wave of increased student population generated by the increased birth rate of the early forties will reach medical school age during the next few years.

In order to assure a continued good showing in the fierce competition for scientific talent, the medical profession as well as the colleges must act.

First, in the area of recruitment, the physicians must reflect their confidence in their profession. As a group, doctors must turn their conversations with the aspirants from our economic and social problems to our humanitarian mandate. The intellectual and moral challenge of medical practice is as great or greater than it has ever been in the history of mankind.

Second, there must be more than the present halfhearted effort on the part of the medical community, the educators, and society to correct the financial disparity of the medical student. In the modern university, the medical student is one of the few without graduate stipends, and in the community the intern is the only postgraduate student working at "slave labor" compensation. There are all types of fellowships and stipends in other disciplines. Scholars are needed in the basic areas, but the man motivated to study medicine should not have to suffer for his desire. The present loan funds, scholarship and fellowship support does not touch the needs. An all-out effort must be made to better the lot of the medical scholar.

Samuel P. Martin, M.D., Provost
J. Hillis Miller Health Center
Gainesville

On the Living Cadaver

For many years now, the Joint Commission on Accreditation has held the autopsy rate high on the list of musts for certification and continuing recertification of its hospitals. The thinking, I suppose, is that the autopsy is a teaching instrument that allows the physician to see inside and get a visual interpretation of the disease process that he had diagnosed or perhaps conversely that he had failed to diagnose. The cadaver has been used for too many years for teaching purposes to deny that it is of real value, and it will not be the purpose of this editorial to minimize the desirability of obtaining autopsies on as many of our patients as we possibly can and using the experience gained therefrom accordingly.

There is, however, a vast amount of disease which is readily available for teaching purposes and which is of vital interest to our practicing physicians. This material is alive, viable and functioning in a state of physiopathology in which there can be some expectancy of return and repair and which can give a dynamic concept to a textbook description. I am referring, of course, to the surgical patient who once was a medical patient before he got into the hands of the surgeon. I have long been amazed at the lack of interest on the part of some of our medical men in this field. We spend sometimes many hours and supposedly considerable gray matter in exploring the various differential diagnoses and finally arriving at a conclusion on a difficult case. We narrow the diagnosis down to the possibility of a surgical procedure and then as soon as the case is turned over to the surgeon, lose interest in the pathology and/or the patient himself. I have never understood how any of our medical men, internists and general practitioners alike, can fail to be eager to get in on the final drive that will give them direct sight, feel, touch, and even smell of the pathological process that was labored so hard in diagnosing and then suddenly lose all but a nominal interest in the final push. I have long made a plea for our men in general practice to follow this patient on into the operating room and get first-hand knowledge of the exact pathology that they were invited to unravel when the patient first came to their respective offices.

I have long urged our members to take an active part in this surgical field of exploration, probing and delving into disease, to have open and frank discussions with the surgeon while this surgery is being performed, to observe the anatomical variations and the various degrees and shades of pathology and indeed every now and then to learn to expect the unexpected. I myself feel that I have probably obtained as much learning from this active process of getting into the patient literally with both hands as I ever acquired by combing the literature from an easy chair. Our Academy has preached and indeed based its whole purpose for existence on the continued and continual teaching of the general prac-

titioner, and it seems a shame that this vital every day field is so largely neglected and not utilized to its full capacity.

In these days when there is open public bickering between the American College of Surgeons, the American Medical Association, and our Academy of General Practice, we seemed to have lost our primary concept and principles in our relationship one to the other as medical men. The active drive by the American College of Surgeons to keep the general practitioner out of the operating room even in the capacity of surgical assisting is incomprehensible to those of us whose primary concern is the welfare of the patient. The arguments advanced by the College seem so small in light of the foregoing that they seem hardly worth the consideration of rebuttal. We, of course, understand that there are certain surgical procedures which require the use of the third or even the fourth skilled hand. No one would deny that open heart surgery or complicated neurological surgery would need extra trained skill for assistance. These are the exceptions, however, and not the rule.

With these few cases screened and deleted, there would still be a long list of procedures under major surgery that would require various degrees of surgical skill from an assistant. This then would require of the surgeon only that he realize the extent of his own skill, and he could select his assistant accordingly. Obviously, if the surgeon were not qualified to handle the majority of these procedures with the assistance of a resident and or a well trained doctor of medicine, then he would not be worthy of the name of a surgeon. A few surgeons in our territory here have rebutted with the counter that all general practitioners and internists are not trained adequately to assist them in their surgery. My answer is simply that any man who has been intelligent enough to graduate from medical school can be trained to be a good surgical assistant, barring physical handicaps, and if he has the proper will and incentive, can learn in a relatively short number of scrubs. These selfsame surgeons are quite willing to accept surgical residents and interns fresh out of medical school and even to go to the extent of developing surgical residencies of three and four years' duration in our Florida hospitals. They will spend hours training these young men, who have never been out in private practice, to become one of themselves. But then again this is an entirely different point of view which seems unrelated to the present subject in their thinking.

To me, it is a strange paradox that this tendency for surgeons to exclude the general practitioner and internist from scrubbing is more actively pursued in the larger hospitals with busy surgical services than it is in the small relatively quiet hospitals. Their argument is that if something happens to the surgeon, it is necessary to have someone to take over and be able to carry on at least for preservation of the patient's life and safety. In surgical suites that are teeming with eager young surgeons all day long, we hear this to the loudest. I cannot conceive of one of our hospitals here in St. Petersburg finding itself in a position where there is not another surgeon around the house somewhere during all of the day and much of the evening. In a small outlying hospital where the doctors are at a premium, this does not seem to be a very practical point, however.

Enough of this philosophical wandering, and back to the point—that being that there is an unlimited source of teaching material at our fingertips every day in all sections of our fair state and that there is a host of medical men available and eager for learning. From this point of view, it is actually a necessity for the medical man to follow the patient into surgery that he may enlarge his knowledge further and use it for this particular patient and the remainder of his patients as he sees them. If we can keep this concept in mind, I am sure we will have no problem whatever in showing our surgeons that they have a great destiny in our future and just such good medical men as we turn out to be depends on how well they teach us. We have excellent teachers among our surgeons all over the state, and are only making a plea that they share some of this knowledge with us that they may help us better to take care of our patients.

Let us get back into the concept of teamwork in handling the patient and improving ourselves that we may justify our responsibility to the patient and then see if actually the whole problem of medical-surgical relationship will not fall back into its true relationship. This having been done, the tendency further and further to exclude medical men from the operating room will die for lack of substance to support it.

Florida Academy of General Practice
Douglas W. Hood, M.D.
St. Petersburg

This is the first in a series of articles presented in the hope of enabling our readers to profit from the scientific experiences and the individual philosophy of the members of the special interest groups within the Florida Medical Association.

News

The Interim Meeting of the Florida Urological Society is being held on October 6-7 at the Jack Tar Grand Bahama Hotel in the Grand Bahamas, according to announcement by Dr. Henry C. Hardin Jr. of Miami, president of the Society. Dr. Sam Ambrose of Atlanta and Dr. Victor Politano of Durham, N. C., will be guest speakers.

Dr. Samuel P. Martin of Gainesville has been appointed Provost of the J. Hillis Miller Health Center at Gainesville. Dr. Martin has served as Professor of Medicine and Head of the Department of Medicine since 1956. He was also Medical Director of the General Clinics and Director of Postgraduate Education in the College of Medicine.

The Fifth Annual Medical Progress Assembly sponsored by the Birmingham Academy of Medicine in cooperation with the Alabama Academy of General Practice will be held in Birmingham, September 30-October 2 at the Tutwiler Hotel.

The Southern Thoracic Surgical Association will meet November 15-17 at the Arawak Hotel, Ocho Rios, Jamaica, West Indies. Dr. Hawley H. Seiler of Tampa is secretary of the Association.

The Fall Meeting of the Florida Pediatric Society is being held at the Causeway Inn in Tampa on November 15-18, according to announcement by Dr. Fred I. Dorman Jr. of Lakeland, president. Dr. Lawson Wilkins of Baltimore will be principal speaker.

The 13th Biennial Congress of the International College of Surgeons will be held at the Waldorf-Astoria Hotel in New York, September 9-13. Dr. Edward R. Annis of Miami, President-Elect of the American Medical Association, will be featured speaker at the banquet on Wednesday evening, September 12.

A special award for outstanding service to mankind was presented posthumously to Dr. George N. Papanicolaou at the recent annual meeting of the American Medical Association in Chicago. Dr. Papanicolaou was scientific director of the cancer research institute at Miami which bears his name and he became the first honorary member of the Dade County Medical Association in January of this year.

Dr. Edward R. Annis of Miami, President-Elect of the American Medical Association, delivered the first major address since his election at the second Institute for Trustees sponsored by the Baptist Hospital Association at Jacksonville on August 1-2. Speaking at a banquet held the opening day, Dr. Annis presented definitive statements on the health care for the aged issue as well as on other major medical problems of the day.

The Tenth Annual Seminar of the Florida Diabetes Association will be held October 18-19 at the Balmoral Hotel, Miami Beach. Guest speakers include Dr. Guy Hollifield, Charlottesville; Dr. Harvey Knowles, Cincinnati, and Dr. Thaddeus Prout, Baltimore.

Association News

FLORIDA MEDICAL ASSOCIATION ORGANIZED 1874

1963 Annual Meeting Program

In the July issue of The Journal of the Florida Medical Association there appeared two editorial commentaries on our collective apathetic behavior at the last Annual Meeting, manifested by the noteworthy lack of attendance at the scientific program and exhibits. We had a good program but no eager, interested audience to hear the words of our guest speakers. A degree of pride and loyalty to the scientific endeavors of Florida physicians and their honored guests should prompt a better attendance. The exhibits, too, merit more universal interest. It is not expected that everyone attend every meeting, but most of the registered physicians should attend most of the scientific programs; otherwise, there is considerable waste of effort and failure to achieve the educational purpose of our state meeting.

The Committee on Scientific Work will attempt to assemble a scientific program for the 1963 Annual Meeting with as much general interest as possible and will endeavor to avoid conflicts or overlapping of scheduled meetings. As the majority opinion indicated in the questionnaire returns, a combination of Florida physicians and out-of-state guest speakers with both individual papers and panel presentations will be included.

If interest warrants, a scientific motion picture program will be shown and an attempt will be made to revive the hobby collection displays. The main scientific program will be concentrated on Friday and the specialty meetings on Saturday.

Any suggestions to the Committee will be welcome, and a better attendance next May will be anticipated.

Charles H. Lasley, M.D.
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Deaths

Browning, Malissa Dalton, Miami; born in Ilion, N. Y., on Aug. 9, 1918; University of Buffalo School of Medicine, 1949; interned at Edward J. Meyer Memorial Hospital, Buffalo, N. Y., and served a residency in medicine at Jackson Memorial Hospital, Miami; was a member of the American Medical Association, the American College of Physicians, and the American Medical Women's Association, serving as secretary of Branch 33 of that organization; engaged in cancer research at the University of Miami while maintaining private practice in Dade County; died May 22, aged 43.

Knowlton, Roscoe H., St. Petersburg; born in West Acton, Mass., 1880; Harvard Medical School, Boston, 1906; located in St. Petersburg in 1913 and engaged in the practice of internal medicine there until his retirement in 1961; held membership in the American Medical Association and was a fellow of the American College of Physicians; died June 10, aged 82.

Otto, Thomas Osgood, Melrose; born in Key West in 1897; University of Virginia School of Medicine, Charlottesville, Va., 1925; engaged in postgraduate training in surgery for four years at Union Memorial Hospital in Baltimore before entering the private practice of general surgery in Miami in 1929; was a veteran of World War I and in World War II was chief of surgery in three station hospitals and assistant chief at Walter Reed Hospital, Washington, D. C., before serving a two year tour of duty as chief of surgery at the 305th Station Hospital in England; resumed practice in Miami in 1946; suffered a severe attack of coronary thrombosis in 1947 and was never able to resume practice; was a past president of the Dade County Medical Association, a fellow and in 1947 vice president of the Southern Surgical Association, a member of the American College of Surgeons, a founder member of the American Board of Plastic Surgery, and the only honorary member of the Southeastern Society of Plastic and Reconstructive Surgeons; died June 16 in Boston, aged 64, following an attack of coronary thrombosis.

Overstreet, Ralph Mitchell Jr., West Palm Beach; born in Aberdeen, Wash., on Dec. 20, 1914; University of Louisville School of Medicine, Louisville, Ky., 1939; interned at Jackson Memorial Hospital, Miami; enlisted in the Army Medical Corps in 1941 and served with the 214th Artillery for five years in the Pacific Area; had practiced internal medicine in West Palm Beach since 1946; was a past president and a trustee of the Palm Beach County Medical Society, head of the Chest Clinic for the Palm Beach County Health Department for 14 years, a director of the Palm Beach County Tuberculosis and Health Association for 12 years, and a founder and director of the Heart Association of Palm Beach and Martin Counties; served the Florida Medical Association as a member of the House of Delegates, as an original member of the Advisory Committee to Blue Shield (Committee of 17) of which he was chairman for two years, and as chairman of the Credentials Committee for the House of Delegates at the 1962 Annual Meeting; was a member of the American Medical Association, Southern Medical Association and American College of Chest Physicians; died June 21, aged 47, in an automobile accident in Indiana.

Schwartz, Robert Carl, Miami; born in 1907; State University of New York College of Medicine, Syracuse, N. Y., 1932; came to Miami in 1955 from Syracuse, where he was associate professor of pediatrics at his alma mater and chief of pediatrics at Syracuse General Hospital; was chief of pediatrics at Mercy Hospital in Miami and founder of the Southern Chapter of the Cystic Fibrosis Foundation; died July 1, aged 54.

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Meetings

September

Seminar in Neurology, September 27-29, University of Florida College of Medicine, Gainesville

October

Florida Urological Society, October 6-7, Jack Tar Grand Bahama Hotel, Grand Bahamas

Florida Society of Anesthesiologists, October 6-7, Hawaiian Village Motel, Tampa

Tenth Annual Seminar, Florida Diabetes Association, October 18-19, Balmoral Hotel, Miami Beach

Florida Academy of General Practice, Thirteenth Annual Scientific Assembly, October 19-21, Deauville Hotel, Miami Beach

Florida Orthopedic Society, Fall Meeting, October 20-21, Boca Raton Club, Boca Raton

Florida Psychiatric Society, October 20-21, Nassau Beach Hotel, Nassau, B.W.I.

Third Annual Medical Seminar Cruise, University of Florida College of Medicine, October 29-November 5, MS Bergenjford

November

Southern Medical Association 56th Annual Meeting, November 12-15, Hotel Fontainebleau, Miami Beach

Florida Obstetric and Gynecologic Society, November 30, December 1-2, Crystal River

Florida Pediatric Society, November 15-18, Causeway Inn, Tampa

Southeastern States Cancer Seminar, November 15-17, Hotel George Washington, West Palm Beach

Fall Meeting, Florida State Surgical Division of International College of Surgeons, November 16-17, Gainesville

December

Florida Society of Ophthalmology and Otolaryngology, December 7-9, Paradise Point Hotel, Crystal River

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A pair of reading glasses including a case which indicates that Lamar J. Keller of Savannah was the optician was left at the Florida Medical Association's Registration Desk during the Annual Meeting in May at Bal Harbour. If the owner will contact the Association at 735 Riverside Avenue, Jacksonville, the glasses will be sent to him.

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ASSOCIATE WANTED: By young generalist in North Florida college town; modern hospital; good schools and churches; Country Club. Qualifications for AAGP desirable. Excellent financial opportunity. Write 69-432, P.O. Box 2411, Jacksonville, Fla.

PEDIATRICIAN WANTED: For association in Hollywood, Fla. Must be Board qualified or certified. For information contact Medical Business Consultants, 1101 N.E. 79th St., Suite 205, Miami, Fla. Telephone PL 9-0230.

FOR RENT: Complete office. Ready to move into in the Doctors Building. $110. per month including air-conditioning, heat, hot water and janitor service. Downtown location, abundance of free parking for patients. Contact S. J. Wilson, M.D., 309 N. E. River Drive, Fort Lauderdale, Fla.

GENERAL PRACTITIONER WANTED: Medical office large enough for two physicians in West Melbourne, the heart of the missile area, the fastest growing county in the United States. 8000 people in the immediate area with no physician. Less than five minutes from new hospital presently under construction in Melbourne. For additional information write Kelly George, Dairy Road, West Melbourne, Florida or phone PA 3-3694.

WANTED: General Practitioner, Internist, Pediatrician, Obstetrician to join surgeon in new clinic. Exciting growth enterprise in finest Cape Canaveral location. Arrangements open. Write 69-484, P.O. Box 2411, Jacksonville, Fla.

GENERAL PRACTITIONER WANTED: Florida license. Established group practice clinic and small hospital expanding to 80-100 beds, central Florida. Offer one year preceptorship and opportunity for partnership following. Retail pharmacy on premises. Liberal fringe benefits and insurance program, salary and incentive. Contact Bruce M. Thogmartin, Administrator, Kissimmee. Phone 847-3101.

FOR RENT: Suite of offices of retiring GP because of health. Good practice established. Complete equipment can be purchased at your own price on easy terms. Located across the street from a new seven floor 600 bed hospital. Time is important. Phone D. M. Watson 22459, Lakeland, Fla.

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WANTED: Board qualified or Board certified Surgeon to join me in five man group in Miami. Must have Florida license. Must like to work. $1,000 per month. Partnership in three years if mutually satisfactory. Write 69-490, P.O. Box 2411, Jacksonville, Fla.

POSITION WANTED: Anesthesiologist. University (Class A) trained, Board eligible July 1963. 30 years old, male, no service obligation. Florida license. Write 69-491, P.O. Box 2411, Jacksonville, Fla.

PEDIATRICIAN WANTED: As associate with another pediatrician with large established practice, Central Florida city, good hospitals. Write 69-492, P.O. Box 2411, Jacksonville, Fla.

WANTED: Board eligible or Certified Pediatrician to associate with well established pediatrician in suburb in S.W. Miami area. Write Box 1233, Coral Gables, Fla.

WANTED: Competent, medical Neurologist-Electroencephalographer needed to work in loose association with psychiatric group in Jacksonville. Write 69-493, P.O. Box 2411, Jacksonville, Fla.

PROCTOLOGIST: Age 40, Certified colon and rectal diseases, seeks practice opportunity with individual, clinic, etc. Write 69-494, P.O. Box 2411, Jacksonville, Fla.

FOR SALE OR LEASE: Well equipped, large office building, complete including Ritter table good as new; Burdick EKG, well equipped lab with part-time technician available. Central air-conditioning. Six miles south of Largo on Alternate 19. One mile from Madeira Beach. Large, private paved parking lot. Reason for sale—owner has entered institutional practice because of health. Telephone St. Petersburg 391-8510. Or write Lawrence G. Patterson, M.D., 5453-106th St., N., Largo, Fla.

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POSITION WANTED: Diplomate, American Board of Surgery, age 51, clinical instructor medical school, experience, resuming practice in Florida, would consider association with prominent surgeon or medical group. Write 69-495, P.O. Box 2411, Jacksonville, Fla.

GENERAL PRACTITIONER WANTED: To join two other GPs in busy clinic and hospital practice in Miami area, with intention to become partner in three years. Percentage with guaranteed net minimum of $14,400 first year. For particulars write J. G. Weiner, Opa Locka Medical Clinic, P. O. Box 2000, Opa Locka, Fla.

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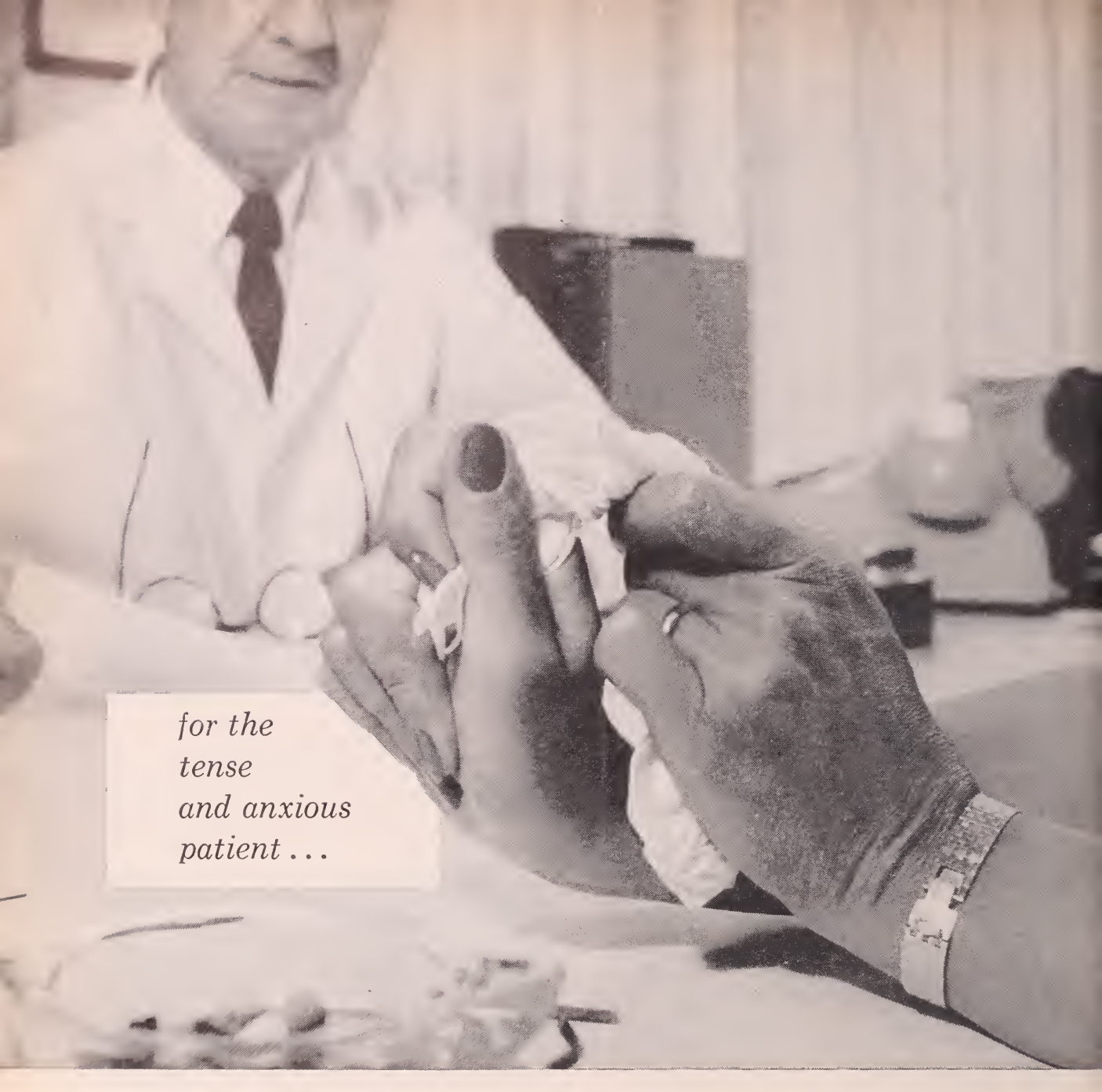
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Books Received

The following books have been received. Those which appear to be of particular interest will be reviewed as space permits.

Diagnosis and Therapy of the Glaucomas. By Bernard Becker, M.D., and Robert N. Shaffer, M.D., F.A.C.S. Pp. 360. Illus. 235. Price $18.00. St. Louis, The C. V. Mosby Company, 1961.

Medical Genetics 1958-1960. An Annotated Review. By Victor A. McKusick, M.D., Professor of Medicine, The Johns Hopkins University School of Medicine, Baltimore, Md., and Contributors. Pp. 534. Illus. Price $14.50. St. Louis, The C. V. Mosby Company, 1961.

Carcinoma of the Cervix. By John B. Graham, M.D., Luciano S. J. Sotto, M.D., and Frank P. Paloucek, M.D. Pp. 487. Illus. Price $14.00. Philadelphia, W. B. Saunders Company, 1962.

Textbook of Endocrinology. Edited by Robert H. Williams, M.D., with contributions by Twenty-one Authorities. Ed. 3. Pp. 1204. Illus. Price $21.00. Philadelphia W. B. Saunders Company, 1962.

Atlas of Clinical Endocrinology. By H. Lisser, A.B., M.D., and Roberto F. Escamilla, A.B., M.D. Ed. 2. Pp. 489. Illus. Price $23.00. Saint Louis, The C. V. Mosby Company, 1962.

General Pathology based on Lectures delivered at the Sir William Dunn School of Pathology, University of Oxford. Edited by Sir Howard Florey, Professor of Pathology. Ed. 3. Pp. 1104. Illus. Price $22.00. Philadelphia, W. B. Saunders Company, 1962.

First International Conference on Congenital Malformations. Papers and Discussions Presented at the First International Conference on Congenital Malformations, London, England, July 18-22, 1960. Compiled and Edited for The International Medical Congress, Ltd. Pp. 314. Price $7.50. Philadelphia, J. B. Lippincott Company, 1962.

Current Therapy—1962. Latest Approved Methods of Treatment for the Practicing Physician. Edited by Howard F. Conn, M.D. Pp. 790. Price $12.50. Philadelphia, W. B. Saunders Company, 1962.

Irritation and Counterirritation: A Hypothesis About The Autoamputative Property of the Nervous System. A Scientific Excursion into Theoretical Medicine. By Adolphe D. Jonas, M.D. Pp. 368. Price $7.50. New York, Vantage Press, 1962.

An Atlas of Head and Neck Surgery. By John M. Loré, Jr., M.D., F.A.C.S. Pp. 490. Illus. Price $25.00. Philadelphia, W. B. Saunders Company, 1962.

A Textbook of Obstetrics. By Duncan E. Reid, M.D. Pp. 1087. Illus. Price $18.50. Philadelphia, W. B. Saunders Company, 1962.

Renal Biopsy: Clinical and Pathological Significance. Ciba Foundation Symposium. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Margaret P. Cameron, M.A. Pp. 395. Illus. 134. Price $10.50. Boston, Little, Brown and Company, 1962.

Early Detection and Diagnosis of Cancer. By Walter E. O'Donnell, M.D., Emerson Day, M.D., F.A.C.P., and Louis Venet, M.D., F.A.C.S. Pp. 286. Illus. 85. Price $12.00. St. Louis, The C. V. Mosby Company, 1962.

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War II. Volume I. Editor in Chief, Colonel John Boyd Coates, Jr. M.C., Editor for Internal Medicine, W. Paul Havens, Jr., M.D. Pp. 880. Illus. Price $7.50. Office of the Surgeon General, Department of the Army, Washington, D. C., 1961.

Current Diagnosis & Treatment. By Henry Brainerd, M.D., Sheldon Margen, M.D., Milton J. Chatton, M.D., and Associate Authors. Pp. 760. Price $8.50. Los Altos, Calif., Lange Medical Publications, 1962.

Shock: Pathogenesis and Therapy. An International Symposium. Stockholm 27th-30th June, 1961. Sponsored by Ciba. Edited by K. D. Bock. Basle. Pp. 387. Illus. 120. 1962, Sprenger-Verlag, Berlin. Available in an English and in a German edition.

Martini's Principles and Practice of Physical Diagnosis. By Yale Kneeland, Jr., M.D., and Robert F. Loeb, M.D. Ed. 3. Pp. 275. Price $4.75. Philadelphia, J. B. Lippincott Company, 1962.

A Study of Psychophysical Methods For Relief of Childbirth Pain. By C. Lee Buxton, M.D. Pp. 116. Price $4.75. Philadelphia, W. B. Saunders Company, 1962.

Clinical Pathology: Application and Interpretation. By Benjamin B. Wells, M.D., Ph.D. Ed. 3. Pp. 541. Illus. Price $9.00. Philadelphia, W. B. Saunders Company, 1962.

Physical Diagnosis. By Ralph H. Major, M.D., and Mahlon H. Delp, M.D. Ed. 6. Pp. 355. Illus. Price $7.50. Philadelphia, W. B. Saunders Company, 1962.

Financing Medical Care: An Appraisal of Foreign Programs. Edited by Helmut Schoeck. Pp. 314. Price $5.50. Caldwell, Idaho, The Caxton Printers, Ltd., 1962.

Medical State Board Questions and Answers. By Harrison F. Flippin, M.D. Ed. 10. Pp. 507. Price $9.50. Philadelphia, W. B. Saunders Company, 1962.

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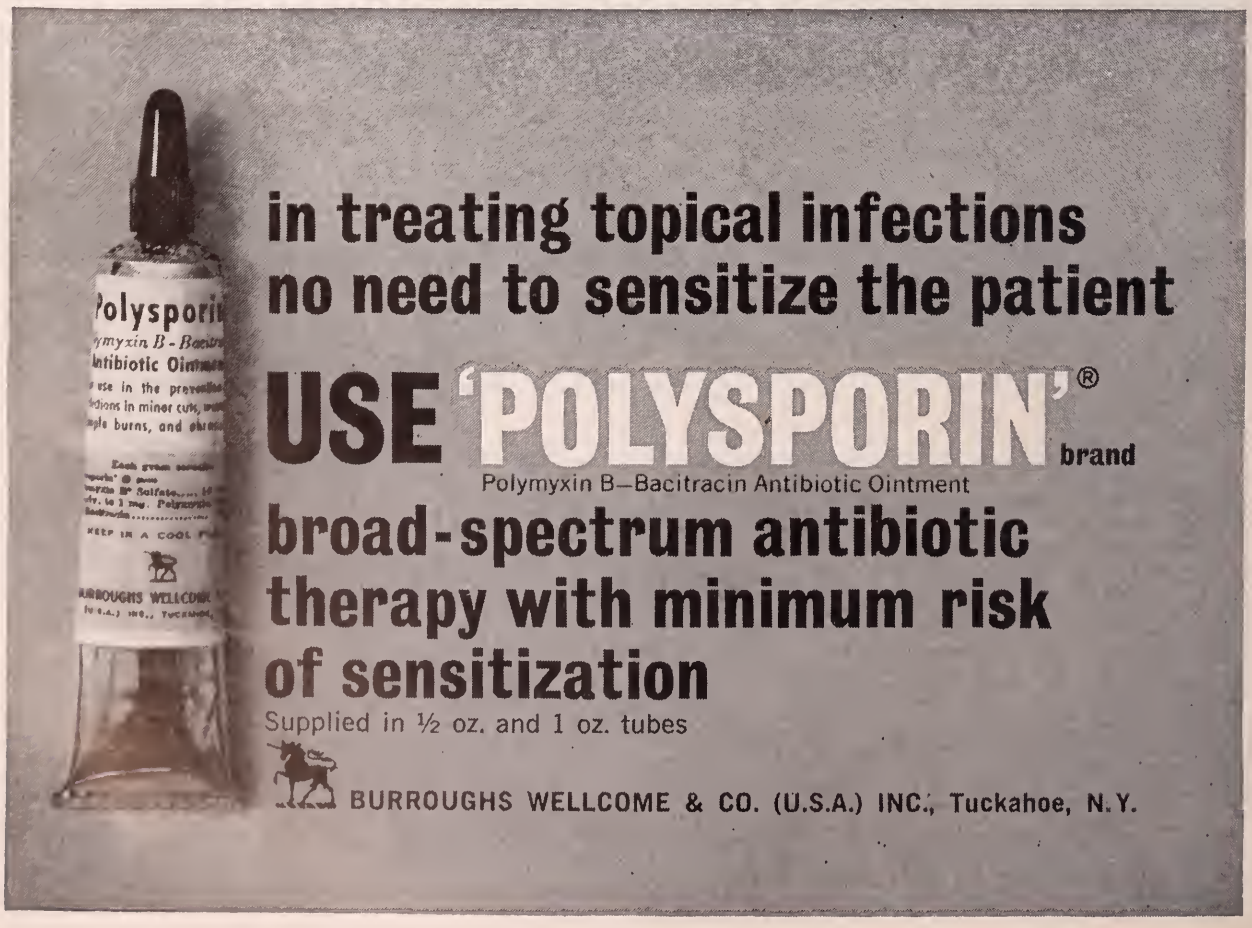
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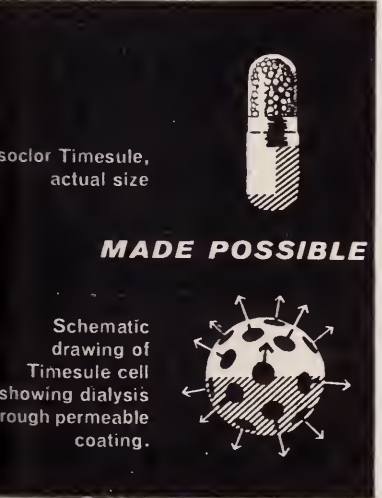
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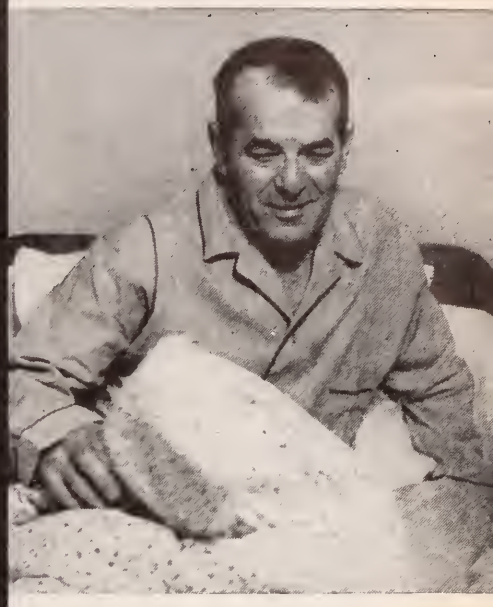


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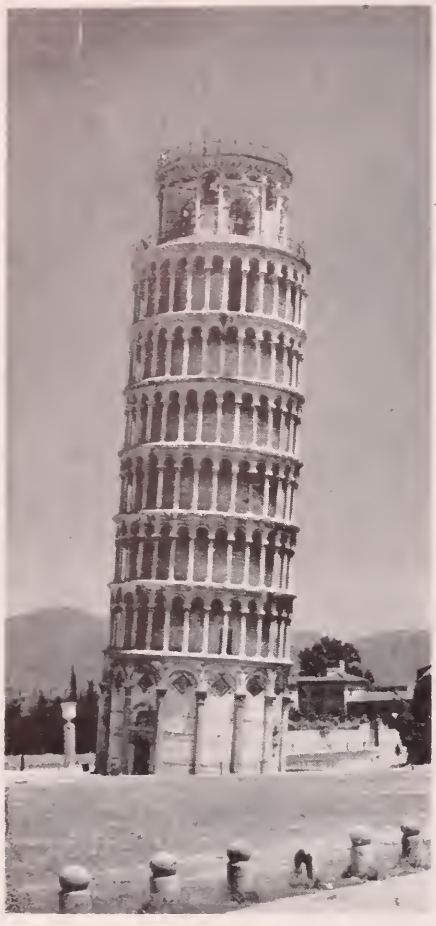
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1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

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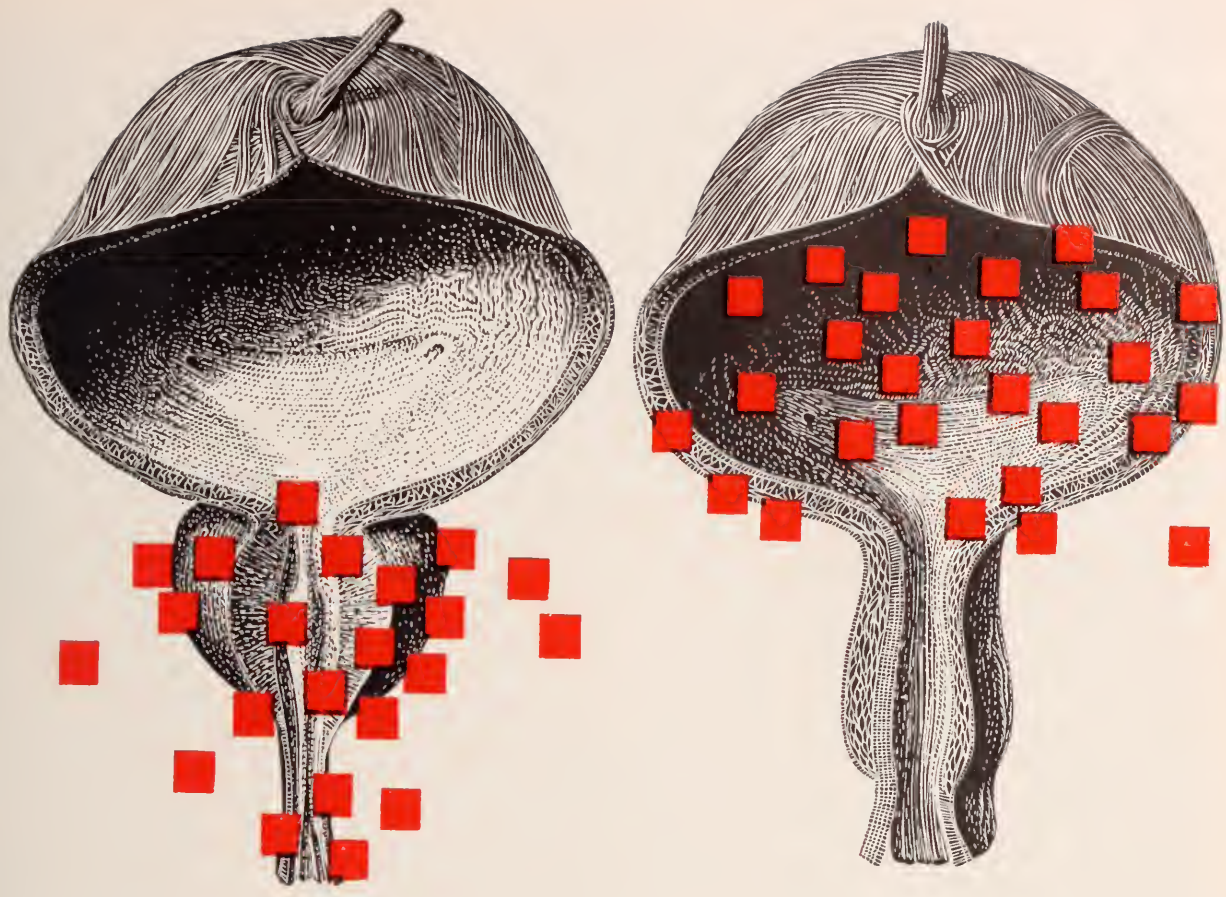
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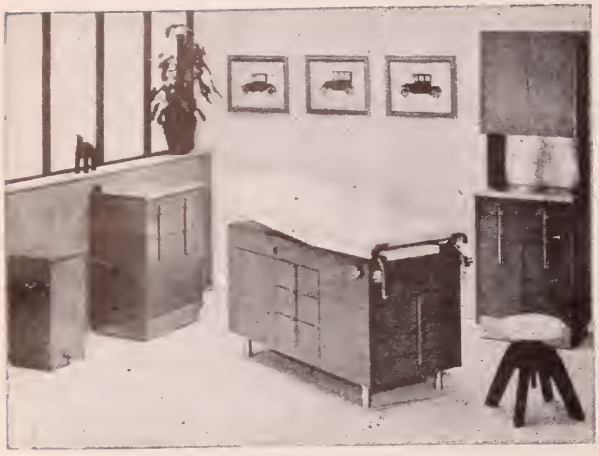
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*Schwartz, I. R.:
Current Therap. Res. 3:29, Feb., 1961.

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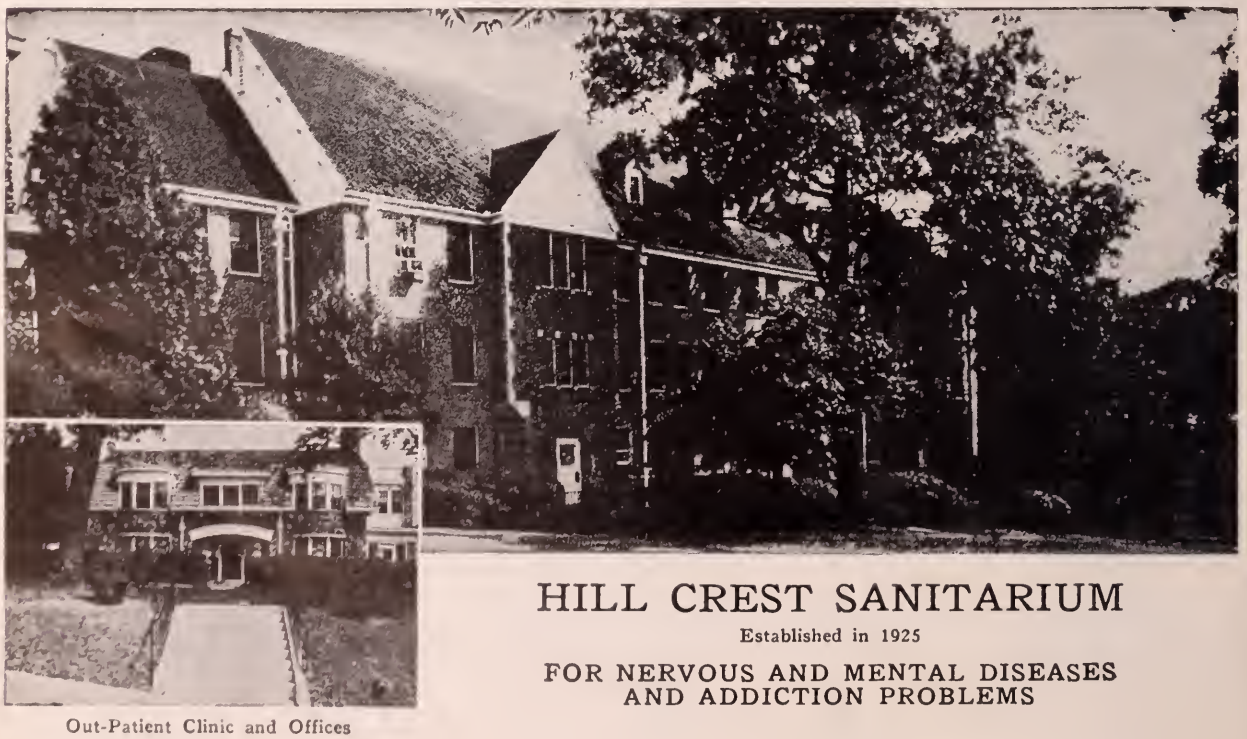
Versatility is the keynote of the Premiere suite. The upper section of the instrument cabinet can be used separately as a wall cabinet and the lower section as a treatment stand. This option allows a greater variety of room arrangement according to personal preference and requirements.

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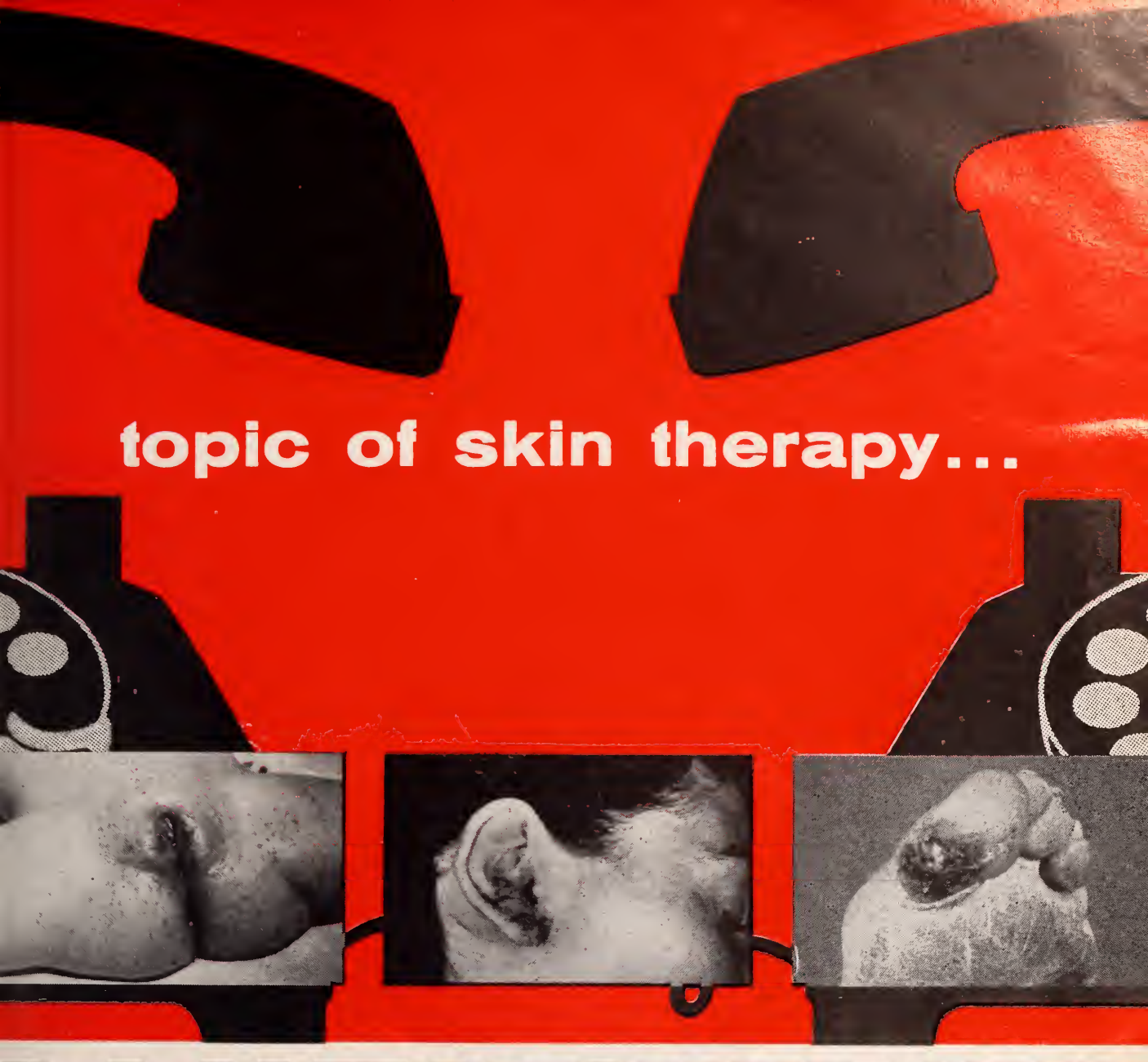
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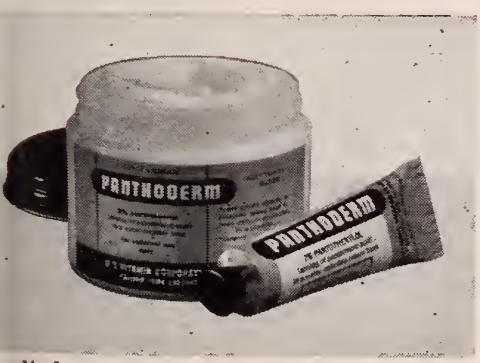


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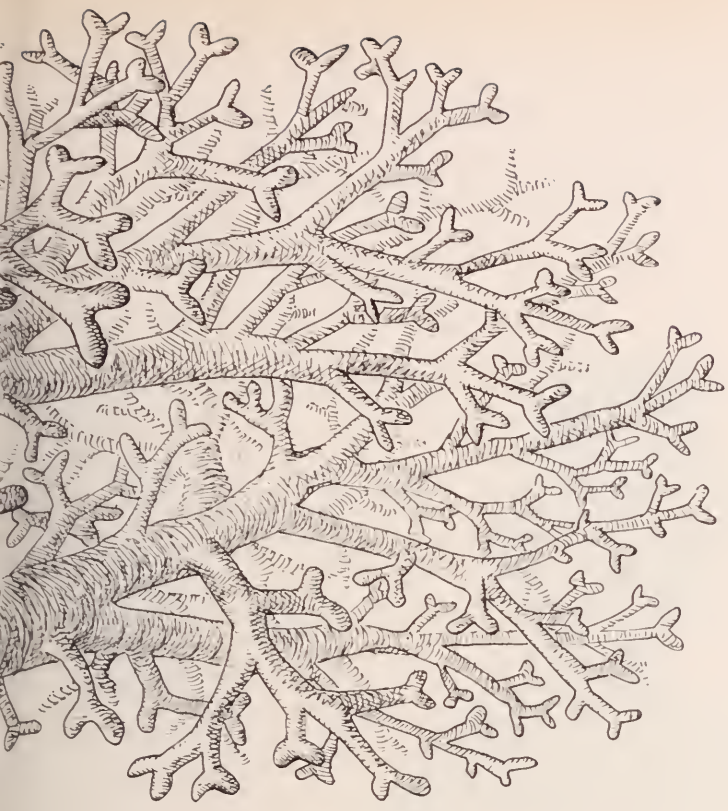
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The illustration: To dramatize the pain and trauma and healing of the peptic ulcer, our photographer burned a "lesion" into crumpled metal with a blowtorch and photographed it, then repaired the damage and rephotographed the result — the "healed" ulcer.

ulcer under repair

"What results can I expect in my ulcer patients?" Shown below is a tabulation of 795 ulcer patients, reported by 69 investigating physicians, in which glycopyrrolate was the anticholinergic employed. They represent a cross section of ulcer patients of all ages, both ambulatory and hospitalized, under various regimens, from all sections of the country.

Note the pattern of results. Robinul showed an "excellent" or "good" response in over 83% of patients, and Robinul-PH provided similar results in 81%.

As for side effects, these often troublesome extensions of anticholinergic action such as dry mouth, blurred vision, etc., were evaluated as "moderate-to-severe" in only 6.7% of a total of 1705 patients in preliminary investigative studies, 795 of whom are the ulcer cases tabulated here.

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Each tablet contains glycopyrrolate, 1.0 mg.

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Each tablet contains glycopyrrolate, 1.0 mg.; and phenobarbital (¼ gr.), 16.2 mg.

Robinul® at work

Brand of glycopyrrolate, Robins

results with Robinul and Robinul-PH in 795 ulcer patients, from 69 clinical investigators*

DIAGNOSIS	ROBINUL					ROBINUL-PH				
	*No. Patients	Excellent	Good	Fair	Poor	*No. Patients	Excellent	Good	Fair	Poor
Marginal Ulcer	11	3	3	3	2	1	0	1	0	0
Pyloric Channel Ulcer	6	3	1	0	2	2	1	1	0	0
Pyloric Ulcer	4	2	1	1	0	1	1	0	0	0
Gastric Ulcer, bleeding	3	1	2	0	0					
Gastric Ulcer	48	31	11	1	5	12	5	7	0	0
Gastric Ulcer, penetrated	1	0	1	0	0	1	1	0	0	0
Gastric Ulcers, multiple	1	1	0	0	0					
Duodenal Ulcer	494	220	195	48	31	99	41	38	13	7
Duodenal Ulcer, bleeding	38	19	15	3	1	2	1	0	1	0
Duodenal Ulcer, obstruction	13	4	3	1	5					
Duodenal Ulcer, perforated	5	2	1	0	2	6	0	3	1	2
Gastric and Duodenal Ulcer	4	2	2	0	0					
Peptic Ulcer, unspecified	25	19	4	0	2	18	8	7	2	1
TOTALS	653	307	239	57	50	142	58	57	17	10
		83.6%					81.0%			

*Clinical reports on file, A. H. Robins Company, Inc.

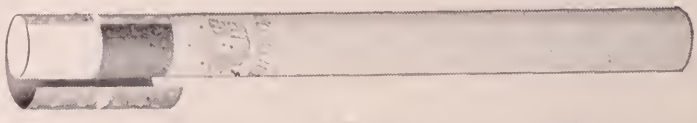
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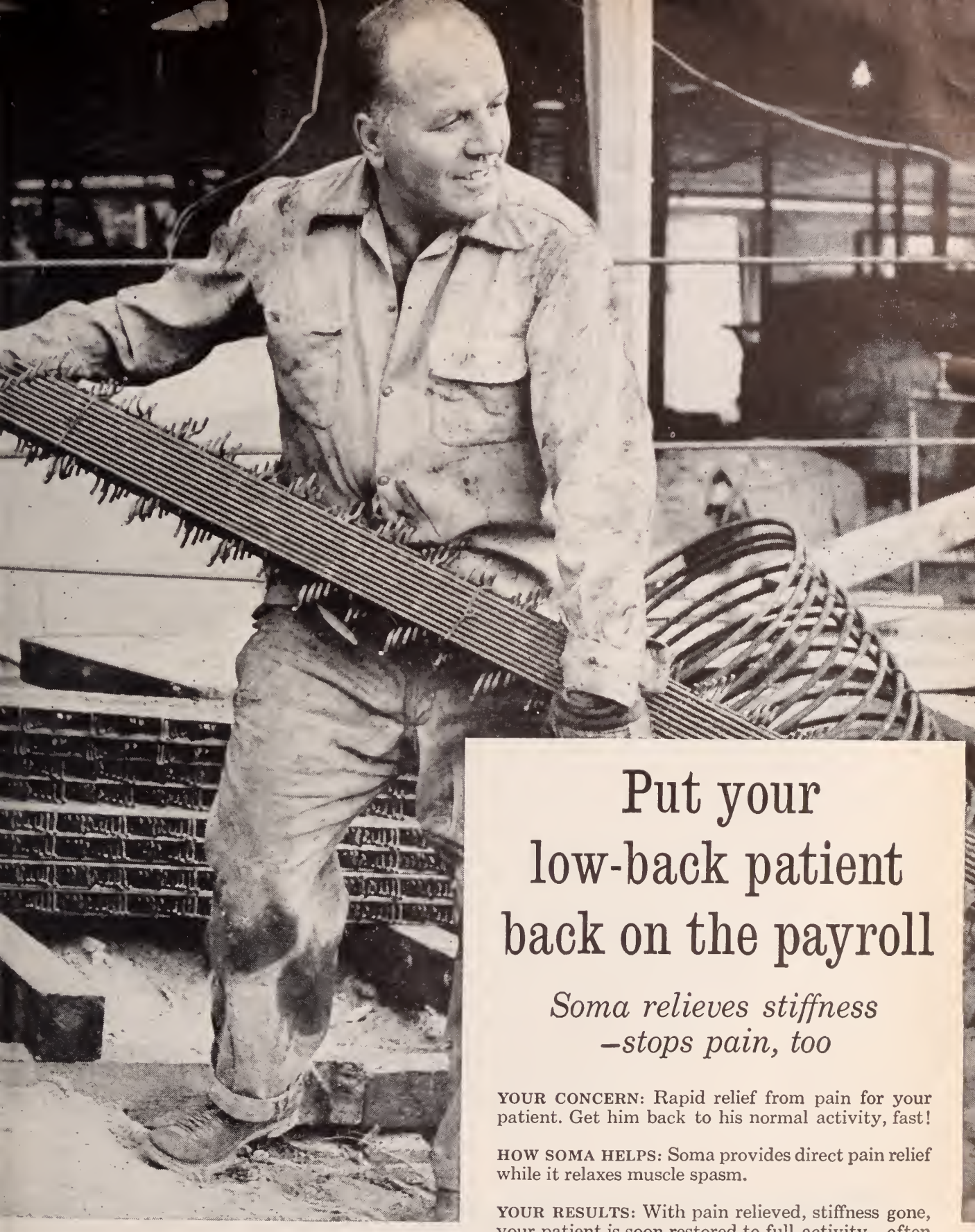
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Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. **USUAL DOSAGE: 1 TABLET Q.I.D.**

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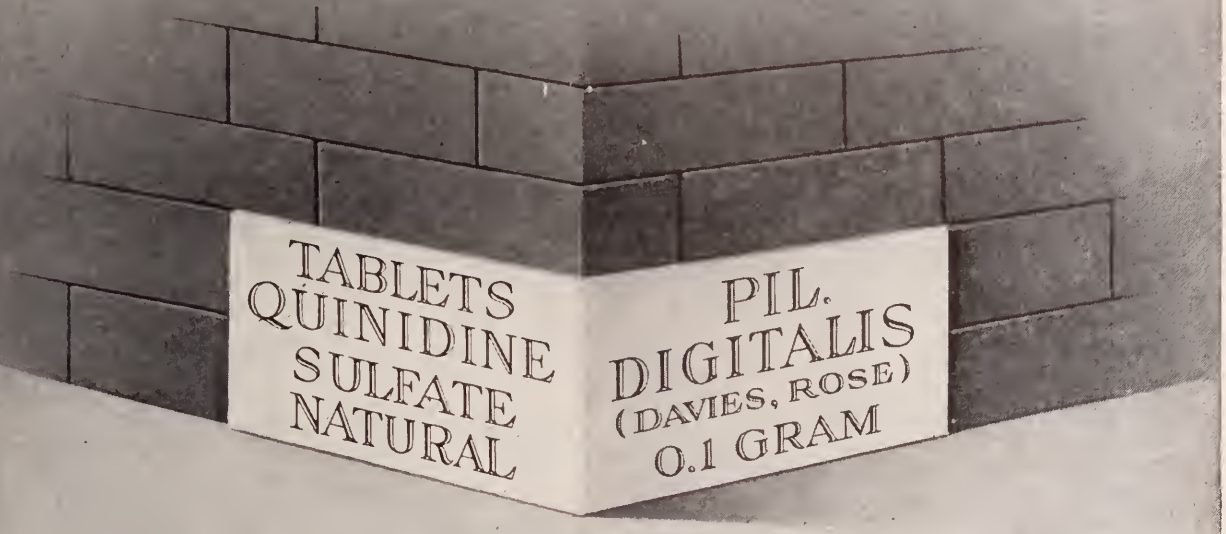
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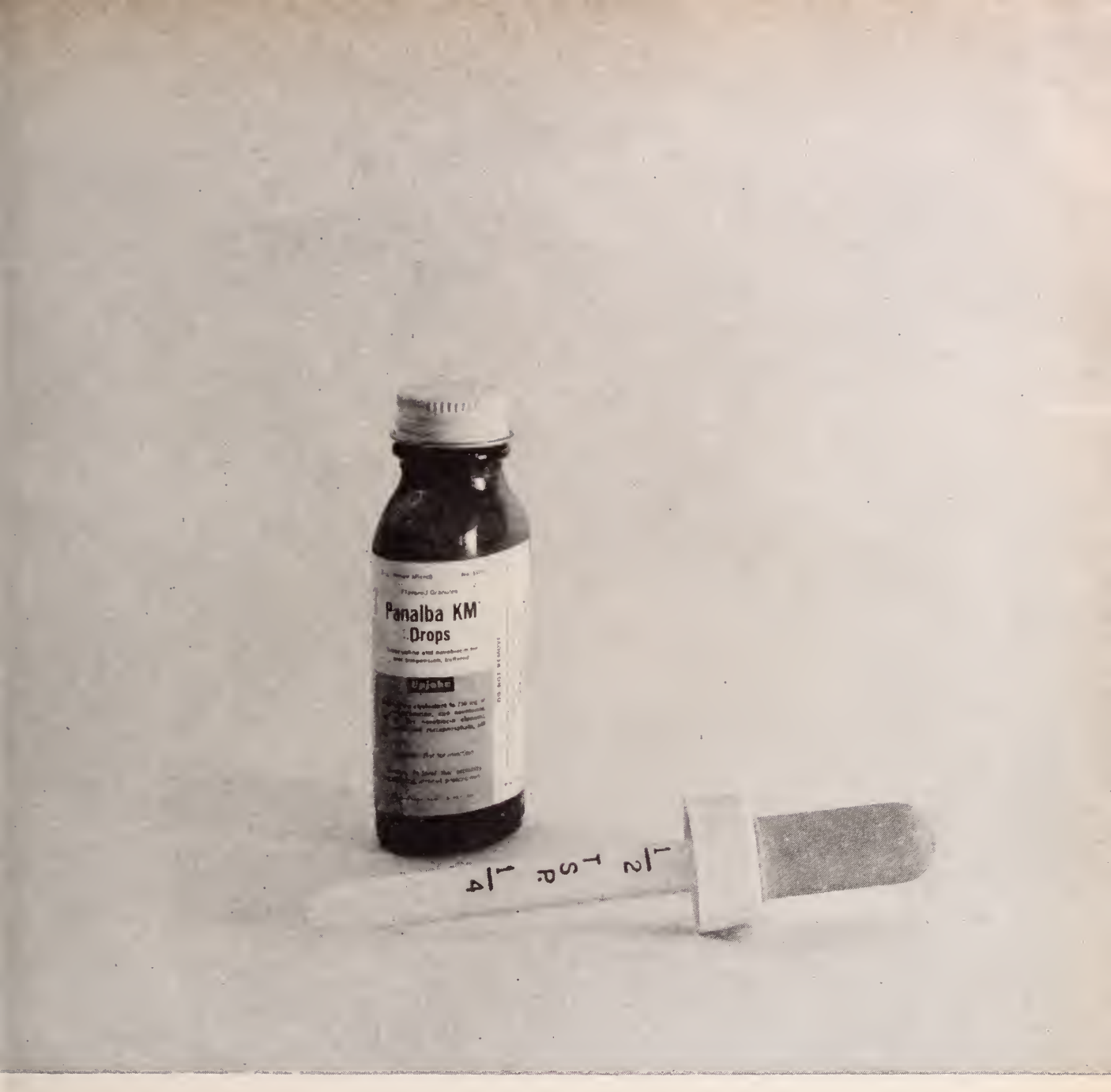
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½ teaspoonful per 7½ to 10 pounds of body weight per day, administered in two to four equally divided doses.
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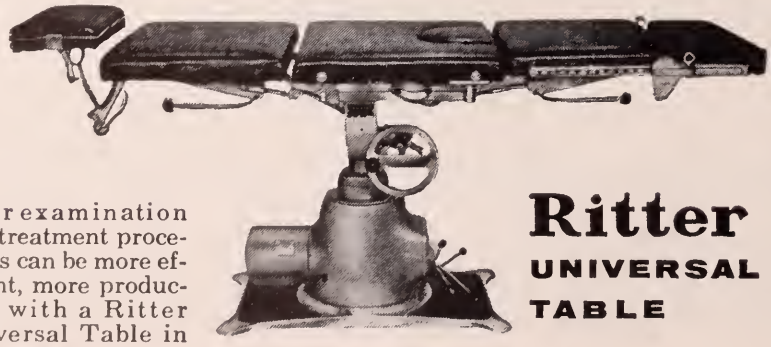
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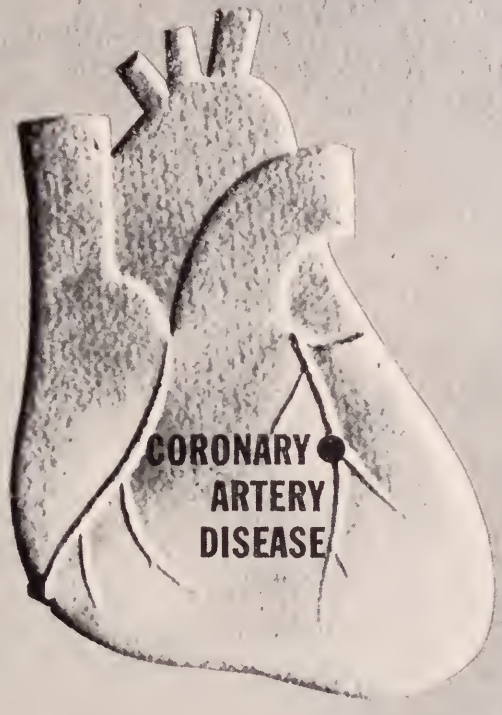
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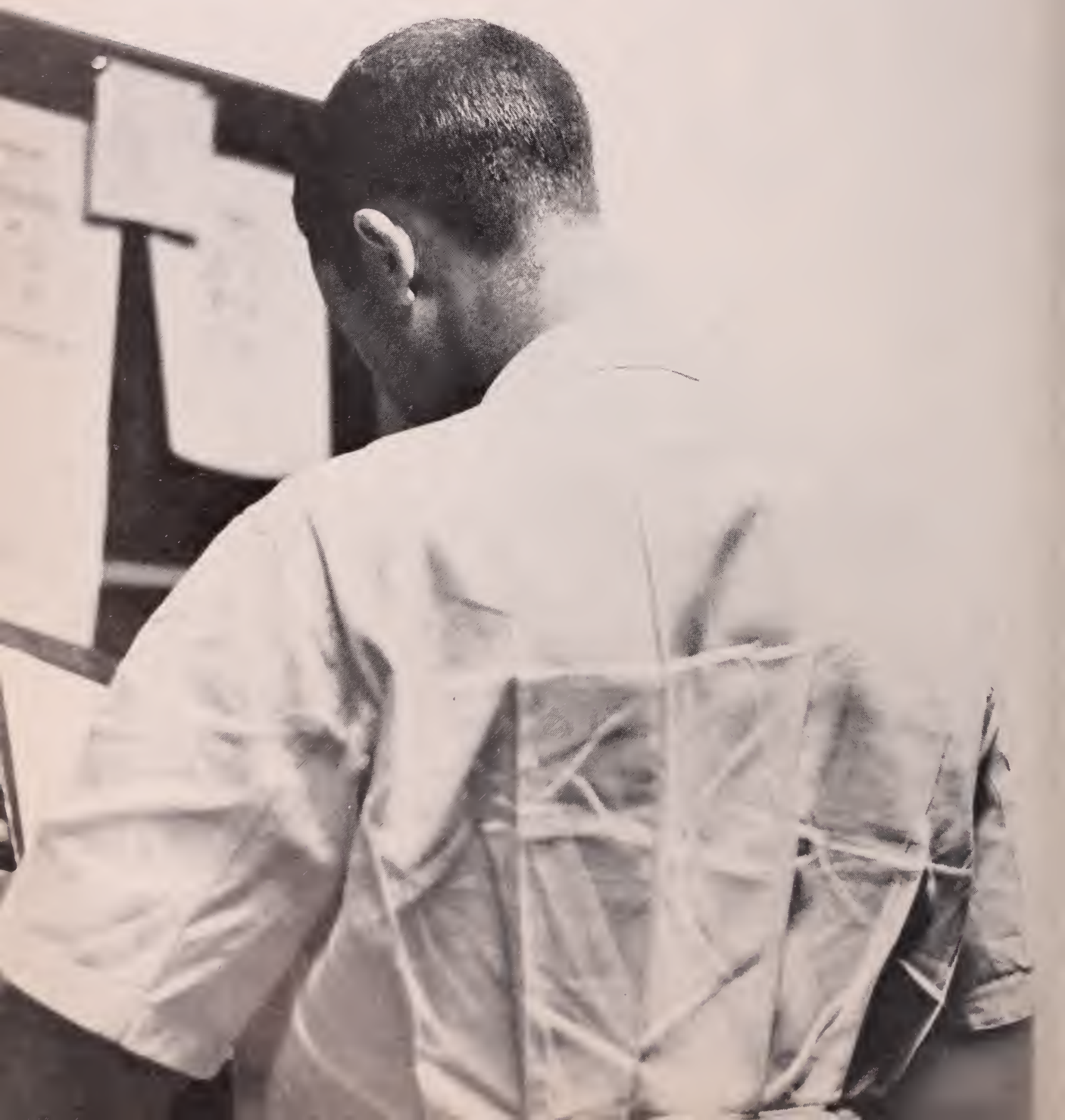
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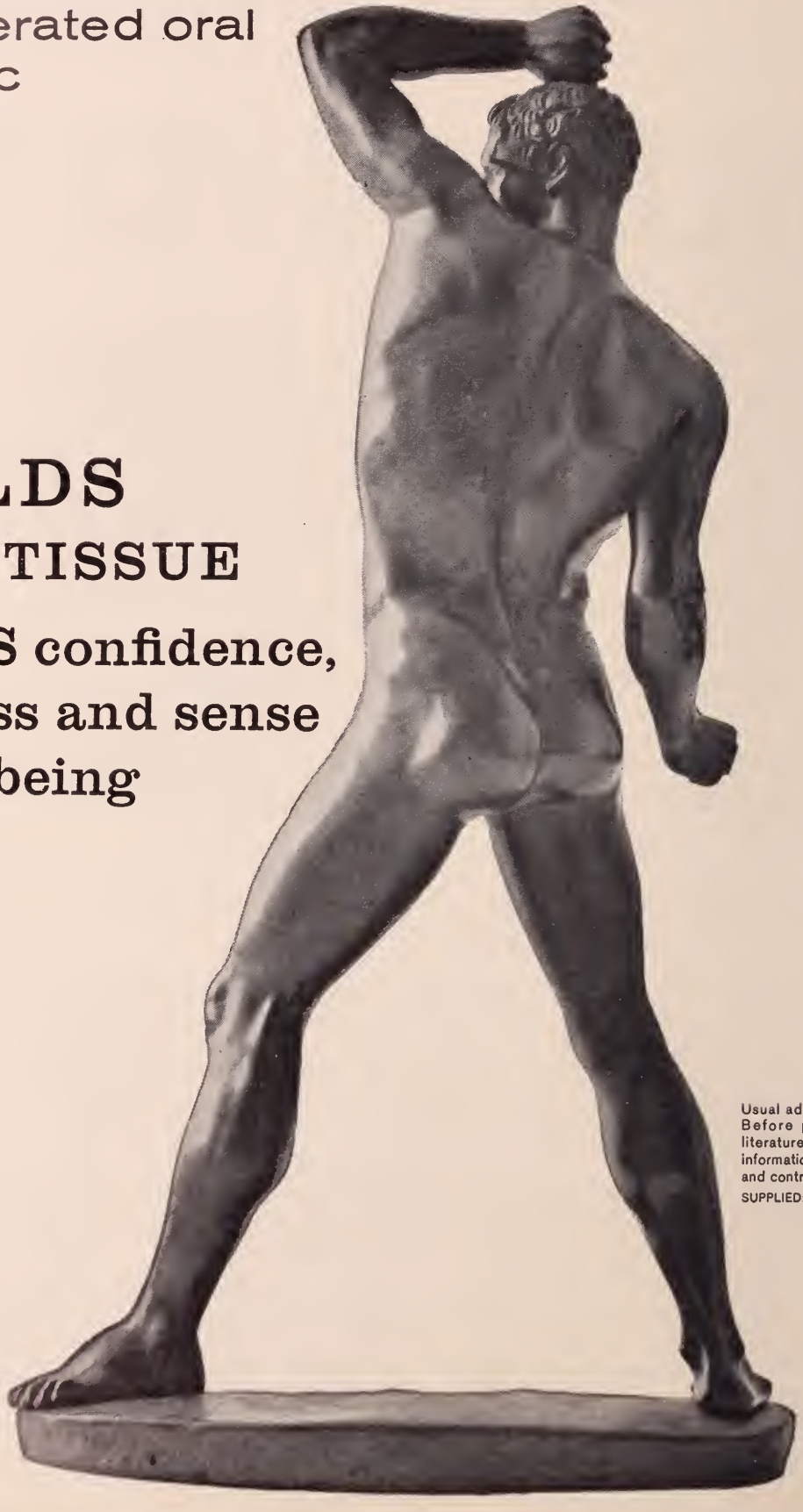
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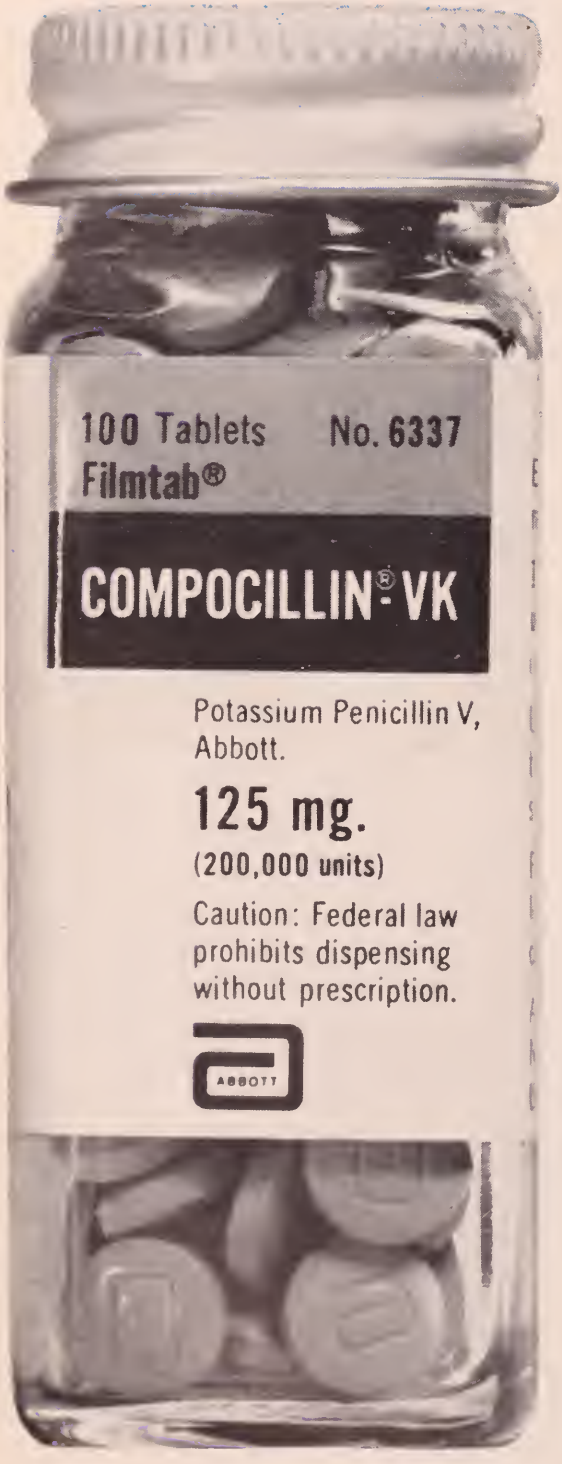
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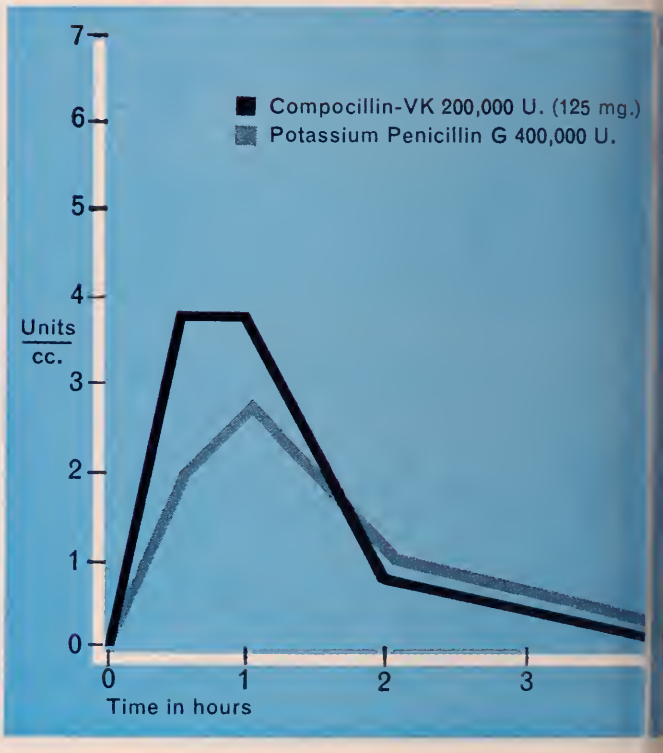
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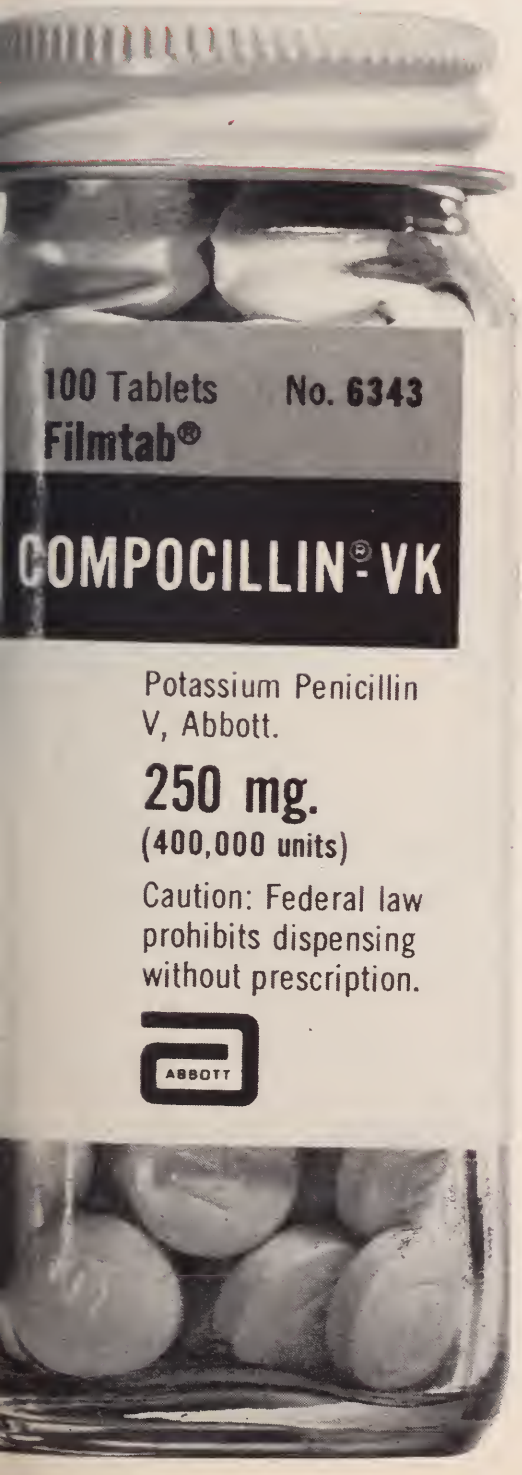


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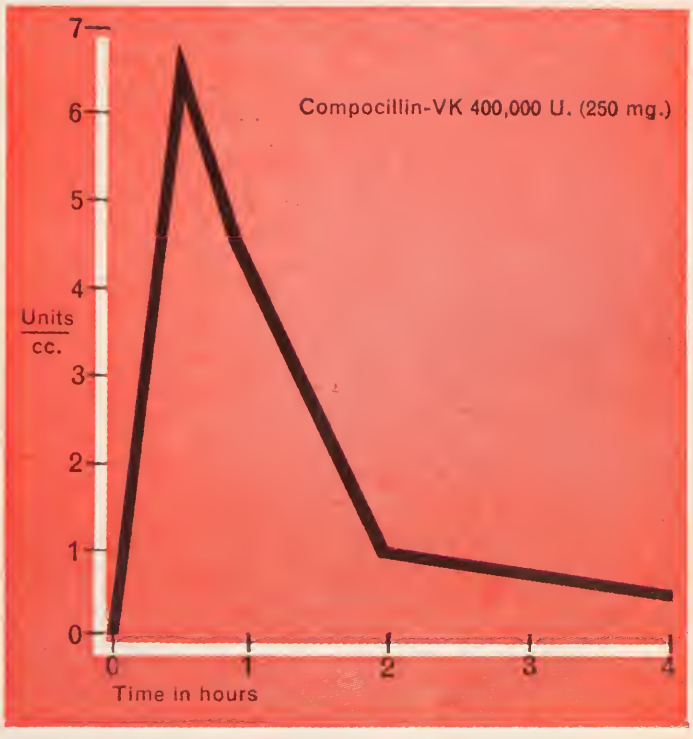
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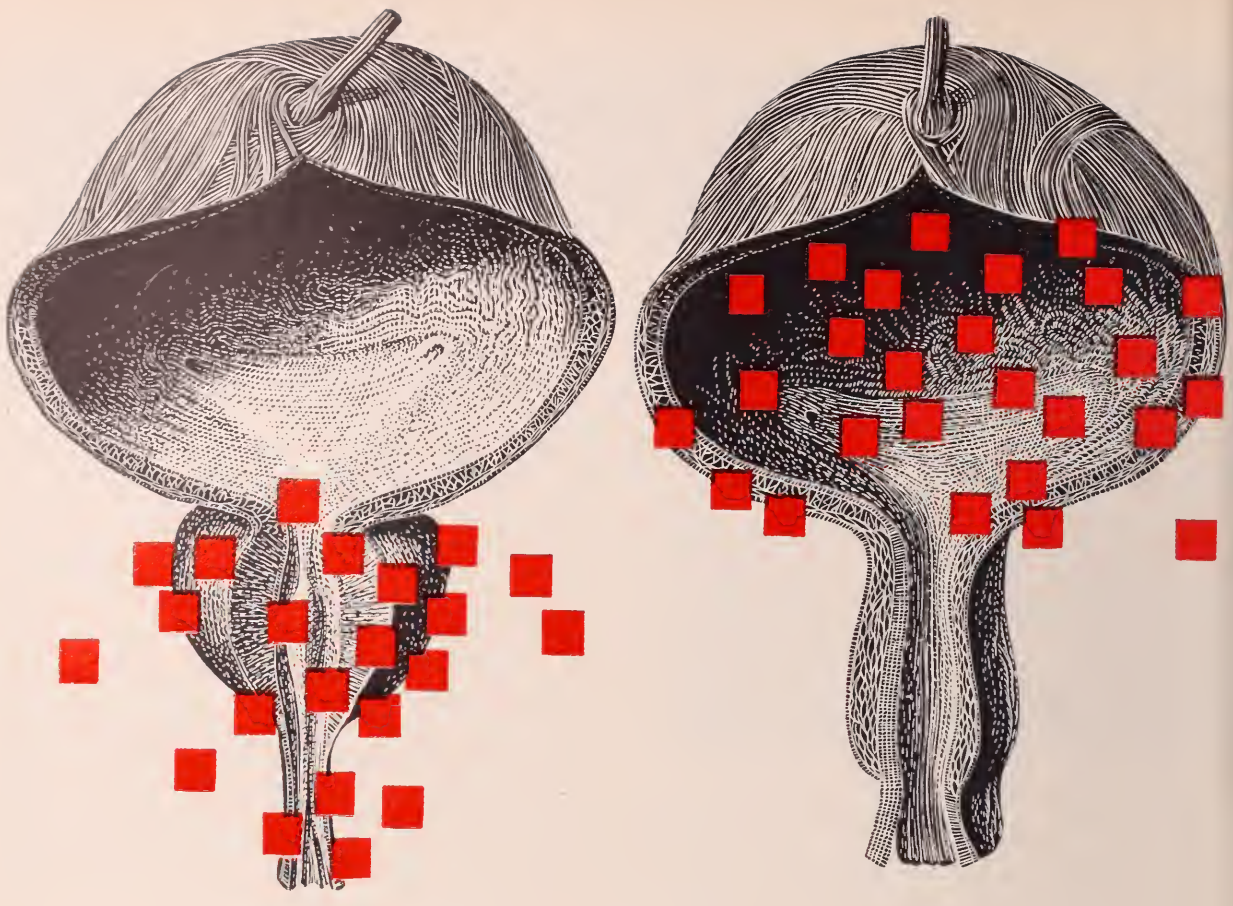
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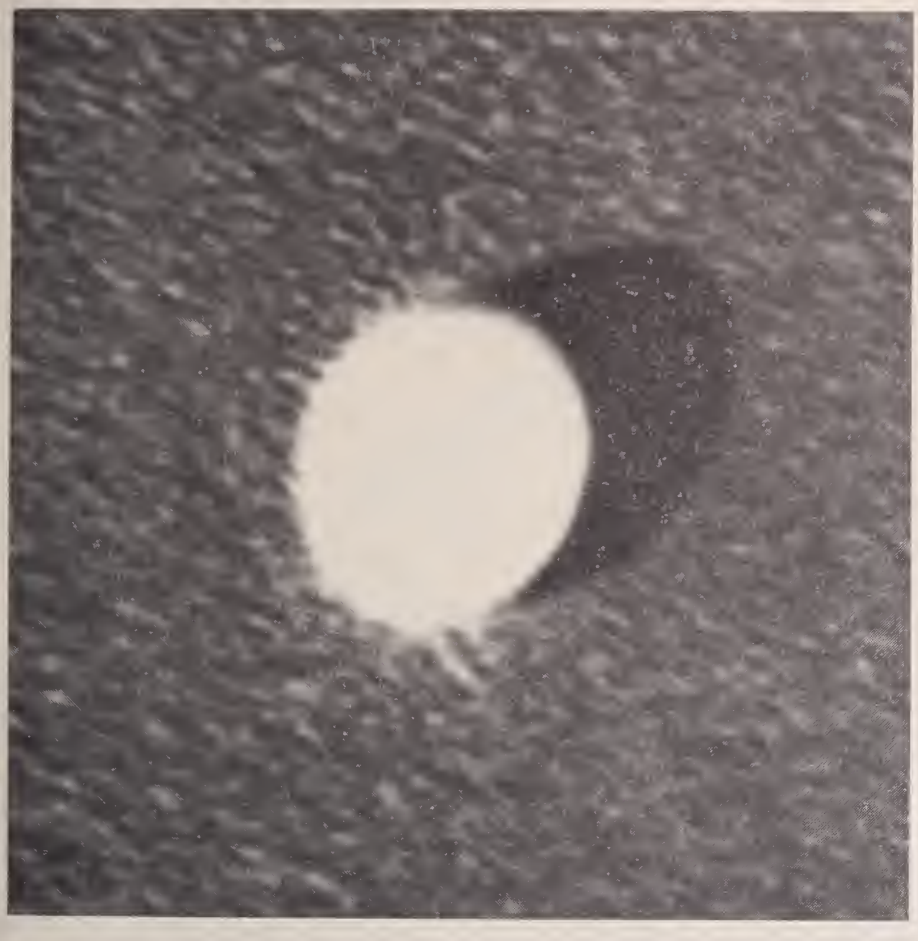
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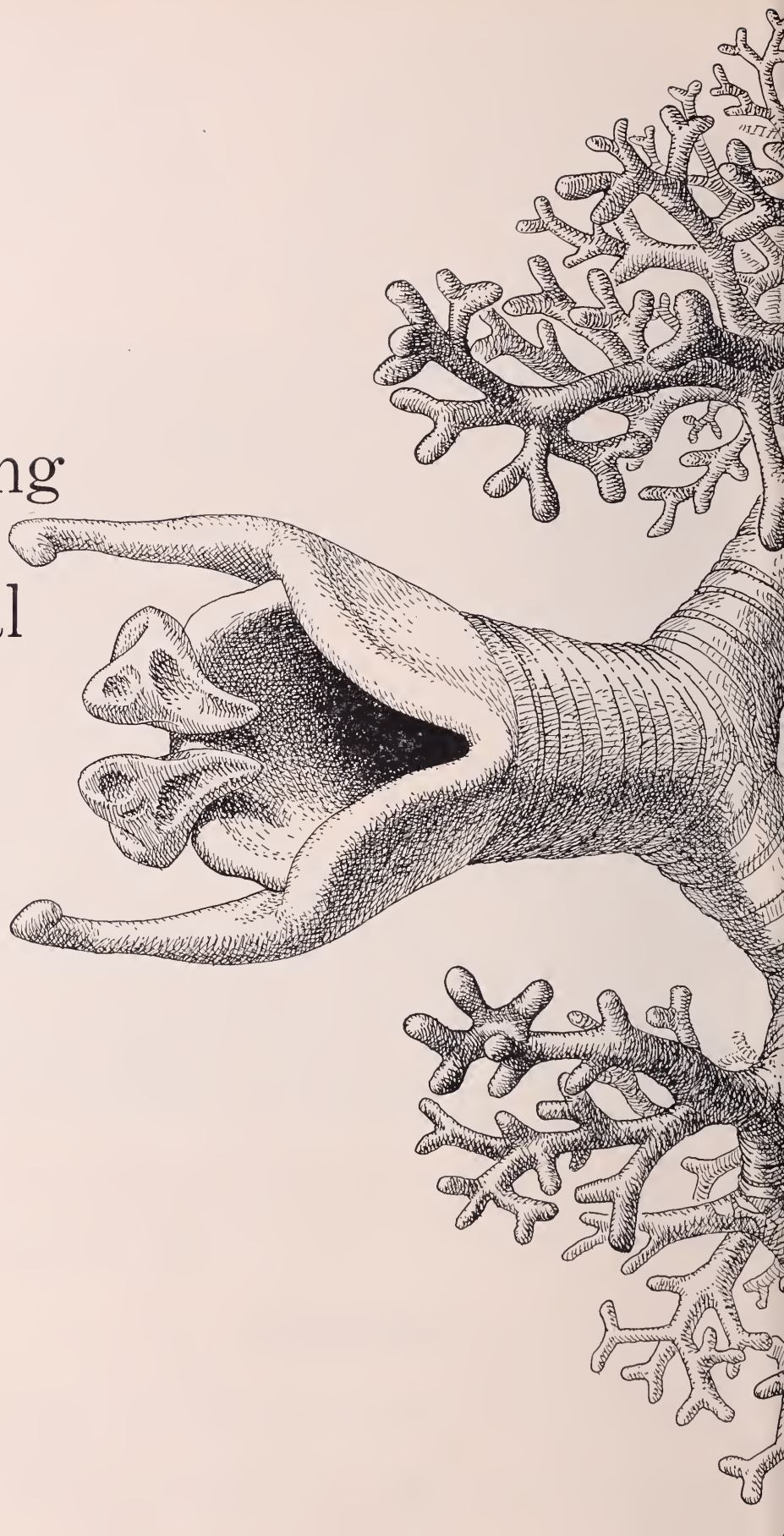
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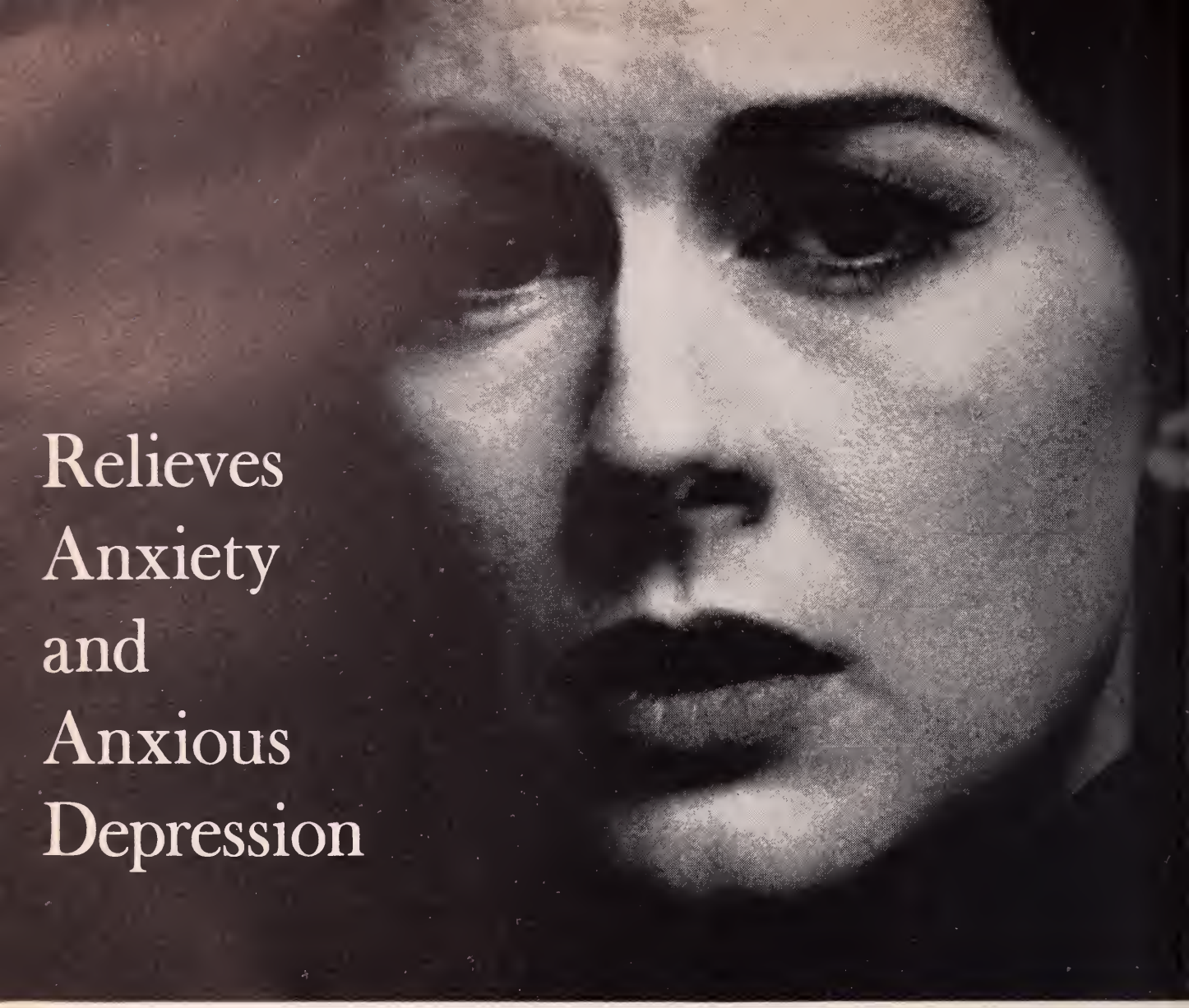


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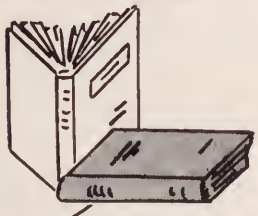
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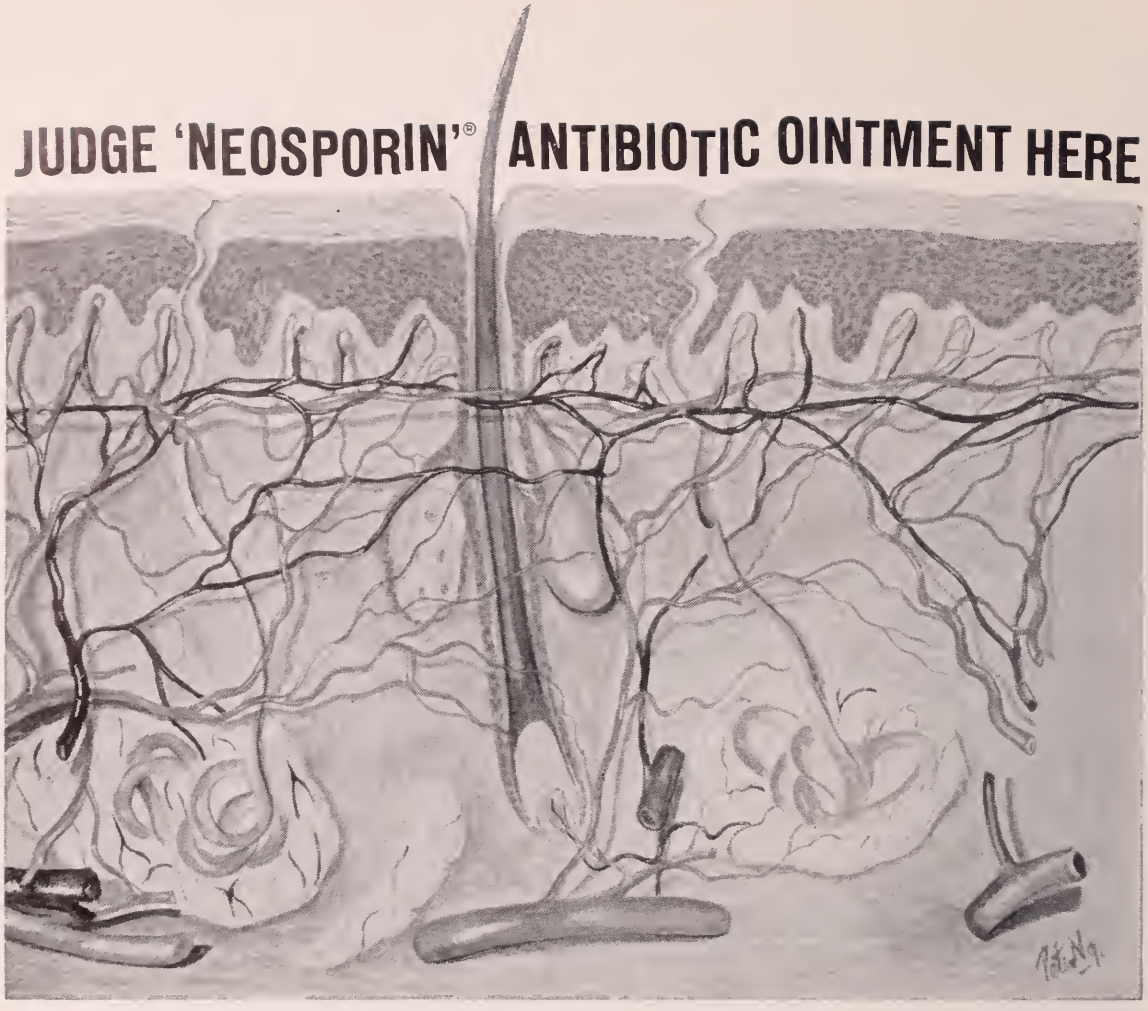
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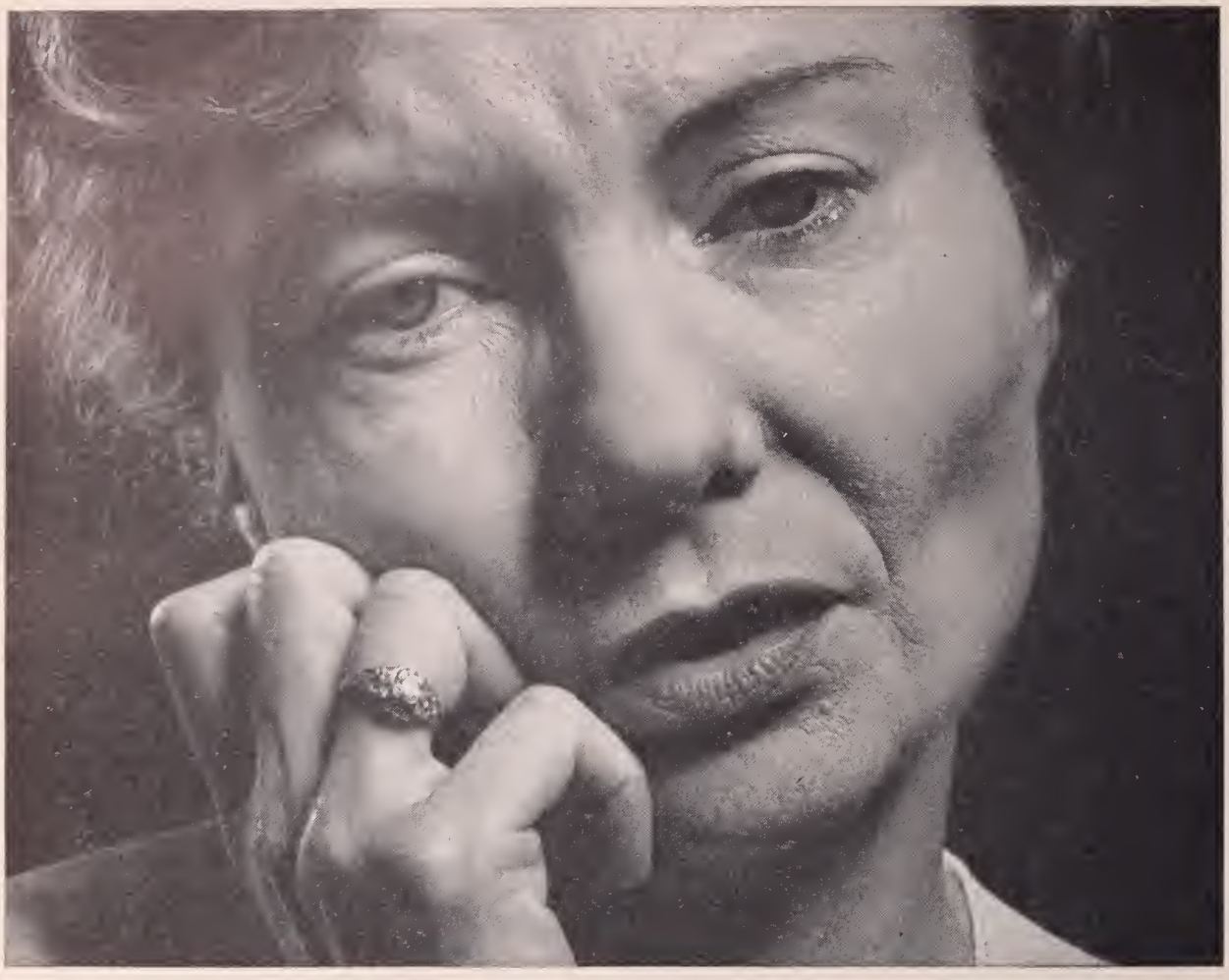
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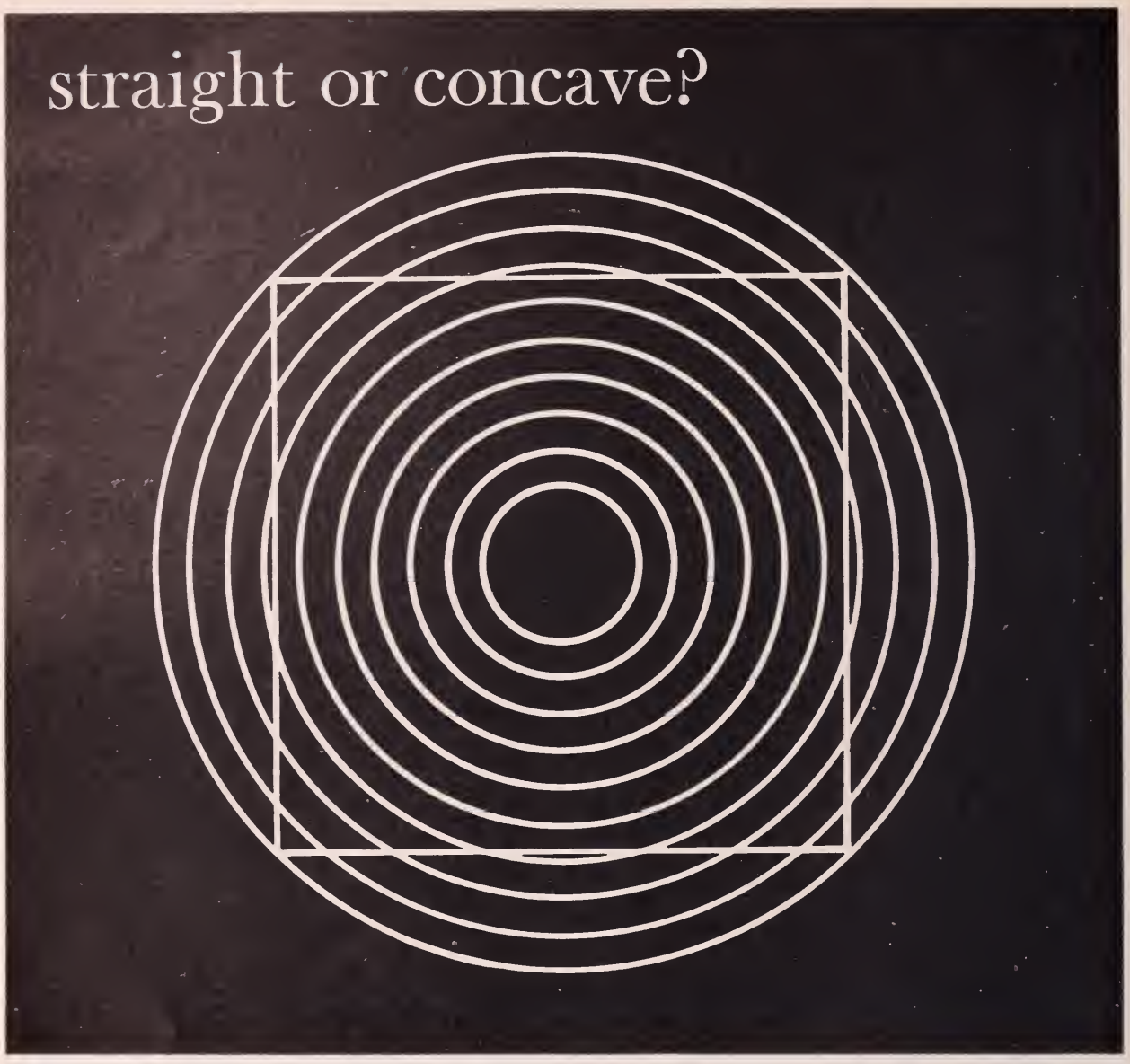


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The JOURNAL
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Stapedectomy

Analysis of 1,000 Stapes Operations

J. Brown Farrior, M.D.
TAMPA

In 1961, stapedectomy and the replacement of the stapes with a graft and an artificial stapes was the most frequent type of operation performed for deafness in otosclerosis. Combined with the other types of reconstruction of the stapes, the stapes operations of 1961 gave better and more permanent hearing improvement than had ever before been achieved in the surgical restoration of hearing.

A review of my first 100 stapes operations performed in 1961 reveals that there were 69 per cent total stapedectomies, 25 per cent partial stapedectomies and 6 per cent stapes reconstructions as the anterior crurotomy. There have been no stapes mobilizations. The earlier types of total mobilization of the stapes have been abandoned because of the high incidence of refixation and the regression of hearing. Most authorities regard stapes mobilization per se as passé.

The review of the total series of 1,000 stapes operations indicates the continuous improvement in the surgical technique (table 1) and the shift from total mobilization on the left to total stapedectomy on the right. This change has resulted in improving the quantity, quality and durability of the restored hearing. As always, the results vary inversely with the severity of the individual patient's surgical pathology, that is, the extent and the type of otosclerosis.

The purpose of this article is to acquaint the reader with the advances in surgery for deafness, including the variations in the surgical pathology, surgical techniques and surgical results.

Surgical Pathology

It is to be remembered that the deafness in otosclerosis is caused by a small growth of bone which immobilizes the stapes, seals the inner ear and prevents the sound from reaching the organ of Corti. Fortunately for the patient, the otosclerosis is a small circumscribed lesion in 75 per cent of cases and in these, fixes only the anterior end of the stapes. The otosclerosis is more extensive in the remaining 25 per cent; in these, the otosclerosis may extend to involve both crura of the stapes, and the foot plate of the stapes, or it may completely fill the oval window niche. In the still more advanced type of otosclerosis the entire inner ear is invaded by the otosclerotic bone; this gradually destroys the function of the auditory nerve, and the patient cannot be helped by surgery.

This intriguing variation in the pathology of the stapes is a continuous challenge to the otologic surgeon. The microscopic variations in the surgical pathology of the stapes[1] require a vast armamentarium of surgical technique in order to obtain the maximum lasting hearing improvement without injury to the inner ear.

There is no standard stapes operation.

Stapes Surgery

The goal of all stapes operations is to restore the normal mobility of the ossicular chain to conduct the sound into the inner ear. The stapes operations should restore normal hearing when the inner ear is normal. The function of the inner ear is measured preoperatively by bone conduction. Preoperatively, the bone conduction averages about 30 decibels better than the air conduction, creating a 30 decibel air-bone gap. Postoperatively, in such an average patient, a 30 decibel hearing improvement is therefore complete closure of this air-bone gap, the goal of stapes surgery.

Read before the Otolaryngology Section of the Florida Society of Ophthalmology and Otolaryngology, Miami, May 28, 1961. Revised with statistics, February 1962.

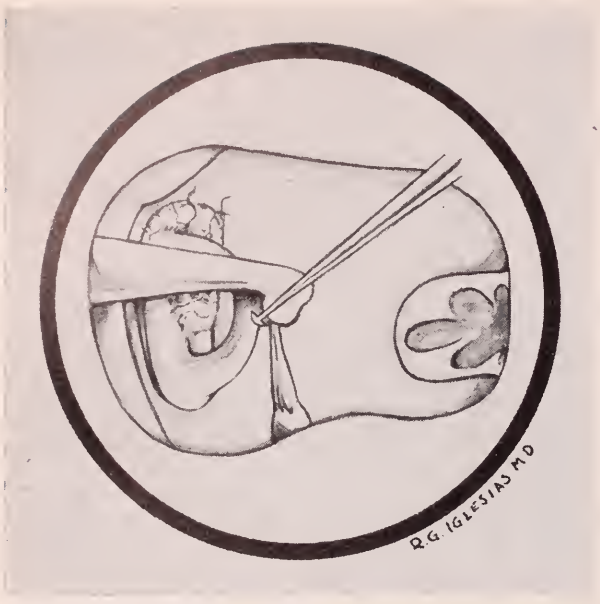


Fig. 1.—Physiological Stapedectomy. The preservation of the stapedius tendon is the first step in the technique in the physiological stapedioplasty. On the left are the incus, stapes and stapedius tendon. On the right is the round window. Note the otosclerosis invading the stapedial foot plate, the pathological indication for total stapedectomy.

The bone conduction may decrease with advancing disease or advancing years, so that there may be a partial loss of bone conduction. In advanced cases of this type all that one can hope for is a partial hearing improvement. Nevertheless, when the surgeon achieves complete closure of air-bone gap in the patient, the operation is regarded as successful. Surgically, the operation is not a success unless the individual patient receives all possible hearing improvement and has complete or near complete closure of the air-bone gap.

This potential restoration of all useful hearing is the great advantage of the stapes operations over the old reliable and predictable fenestration operation which restored only 75 per cent of the available hearing. The fenestration in the horizontal semicircular canal is now utilized only in that small percentage of cases when obliterative otosclerosis makes it impossible or hazardous to perform a stapedectomy.

Surgical Technique

The stapes operations are performed through an incision made deep in the ear canal. The eardrum is folded forward, and a few millimeters of bone are removed to expose the incus, the stapes, the oval window and the round window, permitting the microscopic examination of the otosclerosis (fig. 1). When this microscopic examination reveals that only a small portion of the stapes is involved, the remaining normal portion of the stapes may be preserved by a stapes reconstruction as an anterior crurotomy or a crural repositioning. When the foot plate of the stapes is involved in the otosclerosis, it is necessary to perform a total stapedectomy.

The Physiological Total Stapedectomy

The Stainless Steel Stapedioplasty with the Tissue Graft.—The total stapedectomy must be performed with great care to avoid injury to the inner ear. Sudden removal or avulsion of the stapes produces acoustical trauma equal to that of an atomic blast. To avoid this acoustical trauma the foot plate of the stapes is sectioned and removed in segments. In the thin stapedial foot plate, the foot plate may be readily sectioned with the needle-pointed stapes instruments. The delicate removal of these fragments is accomplished without acoustical trauma and in cases with a thin stapedial foot plate the results are almost always gratifying.

Thick foot plate otosclerosis is encountered in 16 per cent of cases and requires the use of the microdrill to accomplish the stapedectomy. In 11 per cent, the thick stapedial foot plate may be segmented with the pointed microdrill and after segmentation may be removed with minimal trauma to the cochlea and with minimal bleeding into the inner ear. In the more advanced 5 per cent of cases extensive use of the microburr is required to perform the stapedectomy. Complications are most likely to occur in these advanced cases which require extensive drilling. The complications are sensitivity to sound (recruitment), nerve deafness from trauma or hemorrhage and delayed bony closure from regeneration of bone. Fortunately, these complications occur to significant degrees in only a small percentage of cases.

All this microsurgery is performed in a field averaging 0.7 mm. by 1.7 mm., or about the size of the undotted "i" in this print of The Journal.

Stapes Grafts

Stapedectomy creates a wide open oval window which, under the microscope, gives a beautiful view of the delicate membranous labyrinth and otolithic membrane. The inner ear must now be sealed with a viable tissue graft, and an artificial stapes must be constructed to conduct the sound into the inner ear.

The currently popular stapes replacement techniques are the tissue graft from the ear with

the stainless steel stapes[2] and the vein graft from the hand with the polyethylene tube.[3] Although the results in these techniques are similar, I prefer the tissue graft and the stainless steel stapes because of the more accurate fixation of the tissue graft in the oval window niche, the more accurate fixation around the incus (fig. 2), the opportunity to preserve the sound protection of the stapedius tendon and the fact that all surgery is performed in a single surgical field minimizing the danger of contamination.

Because of this greater fixation and these other factors, I abandoned the flat vein graft and polyethylene tube technique in 1959. Although this technique is still utilized by Shea[3] with excellent results, the majority of otological surgeons now replace the stapes with a tissue graft and stainless steel stapes.

To prepare a tissue graft, a 2 mm. section of tissue is taken from the posterior surface of the lobule of the ear (fig. 3). This 2 mm. section of tissue is tied in fine stainless steel wire which in turn is looped on one end to be fixed around the incus. The graft and the stainless steel stapes resemble the inverted undotted italicized "j" in the text of this journal, except that the fine hair-like wire is only 0.007 inches in diameter and the entire shaft averages about 4½ mm. in length. The position of the graft sealing the oval window is illustrated in figure 2.

In total stapedectomy there is always the danger of injury to the inner ear and irreversible hearing loss from hemorrhage or delayed end organ nerve deafness. When possible, therefore, I prefer to preserve normal uninvolved portions of the stapedial foot plate. Such an operation is a partial stapedectomy.

The Partial Stapedectomy

Foot Plate Mobilization with Tissue Graft and Stainless Steel Stapes.—In the partial stapedectomy the arch of the stapes is removed (both crura), and the central uninvolved portion of the stapedial foot plate is mobilized. The central mobilized portion of the foot plate is then covered with the tissue graft attached to the incus with the stainless steel stapes. The preservation of the normal mobilized portion of the foot plate protects the inner ear and preserves the maximum auditory function.

There have been many newspaper and magazine articles on the use of the polyethylene tubes to replace the crura of the stapes. In these earlier types of stapes reconstruction the polyethylene tubes were placed directly on the mobilized central portion of the foot plate. Here there was a tendency for the polyethylene tube to slip into the inner ear or to become dislocated from the lenticular process of the incus.[4] For this reason,



Fig. 2.—The Stainless Steel Stapes. The stainless steel stapes is securely fixed to the incus and provides accurate fixation of the tissue graft in the oval window niche. The near weightless 36 gauge stainless steel wire transmits the sound to the inner ear.



Fig. 3.—The Tissue Graft. The tissue graft-stainless steel stapes is prepared by taking a 2 mm. section of subcutaneous tissue (fat) from the posterior surface of the lobule of the ear. This tissue is tied in 36 gauge stainless steel wire which in turn is looped over the 4 mm. Bard Parker knife blade (No. 15). The graft is placed in the oval window, and the loop is closed around the incus.

I prefer to cover the mobilized foot plate with a viable tissue graft which is firmly fixed to the incus with the stainless steel stapes and which will, with healing, become an organic part of the now physiologically mobile stapedial foot plate.

Stapes Reconstruction

THE ANTERIOR CRUROTOMY: THE ANTERIOR CRUROTOMY WITH CRURAL REPOSITIONING.—When only the anterior crus (front leg) of the stapes is involved in the otosclerosis, a segment of the anterior crus may be removed and the posterior uninvolved portion of the stapes may be mobilized and utilized to transmit sound into the inner ear. Although technically more difficult than the total stapedectomy, when accurately performed in appropriate pathological circumstances, the anterior crurotomy will give normal lasting hearing with complete closure of the air-bone gap and without danger of injury to the inner ear.

The anterior crurotomy with crural repositioning consists of moving the fixed base of the posterior crus forward and replacing it over the wide area of mobilized central foot plate.[5]

When pathologically indicated, these operations remain the most satisfactory and safest of all stapes operations. Advantages of the anterior crurotomy are that it does not significantly disturb the inner ear and that it preserves the protective mechanism of the stapedius tendon.

The Stapedius Tendon

When pathological circumstances require a total or partial stapedectomy, the first step in my technique is to preserve, or attempt to preserve, the stapedius tendon (fig. 1). Some patients with total stapedectomy, when the sound protective mechanism of the stapedius has been sacrificed, complain of sensitivity to loud sounds and are disturbed in noisy circumstances. This occasional acoustalgia (sensitivity to sound) motivated the current technique of the preservation of the stapedius.

Technically, the stapedius is preserved by dissecting the stapedius tubercle from the stapes and leaving it attached to the lenticular process of the incus. Anatomically, this procedure is possible in approximately one third of the cases.

Stapedectomies with the preserved stapedius tendon appear to have greater tolerance for sound than stapedectomies with an uninhibited artificial stapes. This can be tested with the audiometer by gradually increasing the volume until it reaches the uncomfortable loudness level. My preliminary audiometric studies indicate that patients with the preserved stapedius tendon have a 40 per cent greater loudness tolerance. It is my plan, therefore, to continue studies with this physiological reconstructed stapedectomy.

Statistical Results

The long term results of stapes operations are, for practical purposes, regarded as stabilized at the end of the sixth postoperative month. This manuscript is, therefore, revised in February 1962 to include the six month statistics on the 200 stapes operations performed from mid-1960 to mid-1961. Either sixth month audiograms or sixth month questionnaires are available on all except two cases.

In these 200 consecutive stapes operations 93.5 per cent of the patients have apparently received a worth while hearing improvement. The hearing is reported as "good" or "very good" in 77.5 per cent, "fair" in 16 per cent and "poor" in 6.5 per cent. In the two cases which are not accounted for by either a sixth month postoperative audiogram or questionnaire, the results were respectively "good" and "fair" at last report and are therefore placed in this category.

The results obtained are directly proportional to the patient's suitability for surgery as determined by the preoperative bone conduction and air-bone gap. In this series 87 per cent were good candidates, 10 per cent were fair candidates and 3 per cent were poor candidates. A good candidate has bone conduction above the 30 decibel level for all three speech frequencies of 500, 1,000 and 2,000 double vibrations per second; a fair candidate has bone conduction below the 30 decibel level for one or more of the speech frequencies; and a poor candidate has bone conduction below the 30 decibel level for all speech frequencies. This rule is not constant, for 16 of the good candidates regarded their result as fair and nine of the fair candidates regarded their result as good, but as a general rule, the quality of the result is directly proportional to the quality of the patients preoperative bone conduction and air-bone gap.

The second most important variable is the thickness and character of the otosclerotic involvement of the foot plate, and they determine the type of stapes operation. There were 5 per cent stapes reconstructions, 20 per cent partial stapedectomies and 75 per cent total stapedectomies. The total stapedectomies are further subdivided into the 59 per cent with thin foot plates

Table 1.—One Thousand Stapes Operations

Stapes Operations	Dates	Stapes Mobilization		Stapes Reconstruction	Partial Stapedectomy	Total Stapedectomy
Consecutive One Hundreds of Operations		Indirect	Direct	Anterior Crurotomy Anterior Crurotomy+ Crural Repositioning"	Polyethylene Tube Stainless Steel Stapes " " with Graft	Vein Graft Gelfoam Tissue Graft
1-100	1955-1956	54	45	1		
101-200	1956-1957	23	77			
201-300	1957	3	92	5		
301-400	1958		77	23		
401-500	1958		50	50		
501-600	1959		19	39	14	28
601-700	1959		3	37	11	49
701-800	1960		3	37	17	48
801-900	1960-1961			7	25	68
901-1,000	1961			4	15	81

Analysis of the surgical technique in 1,000 consecutive stapes operations reveals total stapes mobilization on the left being gradually replaced by stapes reconstruction, partial stapedectomy and total stapedectomy on the right, which give better and apparently permanent hearing improvement.

and the 16 per cent which required the use of the microdrill or microburr. Seven of the poor results occurred in this group, and they will be discussed under "Causes of Failure."

Head noises are usually relieved by stapes operations; of the 200 patients, 97 had head noises; of these, 82 per cent said that the head noises were less, 13 per cent said they were unchanged, and 5 per cent said they were worse.

Ideally, statistical results of hearing improvement should be reported on the percentage of closure of the air-bone gap at the six month postoperative audiogram. It is almost impossible to obtain six month audiograms in all cases because of the wide geographical distribution. Approximately one third of the patients are local (under 100 miles) one third are from more distant parts of the state; and one third are out-of-state. The statistics presented, based primarily upon the questionnaires, therefore serve only as a practical indication of the results obtained, but they do indicate that an extremely high percentage of the patients are grateful for the hearing which has been restored through stapes surgery.

Causes of Failure

Otologists will be interested in the detailed analysis of the 6.5 per cent failures which occurred in these 200 consecutive stapes operations. Of the 13 failures, seven, or 54 per cent occurred in the severe cases with extensive oval window otosclerosis which required the use of the microdrill to create the new oval window.

Detailed study of the seven failures in the cases which required the use of the microdrill reveals that two of these cases presented a nearly complete loss by air conduction and extensive otosclerotic involvement of the labyrinth; that two cases required drilling through deep obliterative otosclerosis to create a new oval window and in these cases, apparently, there had been a bony closure of the oval window; that one other case required similar extensive drilling, a case of congenital deafness in which there was no oval window; and that in two cases there was an inadvertent total mobilization of a thick otosclerotic foot plate, which required excessive manipulation to remove the foot plate. With technical improvement this misfortune has not been encountered in the last 165 consecutive stapes operations.

Of the six failures in cases which were not associated with the use of the drill, two are attributed to associated nerve deafness and in one of these cases there was an associated hydrops. One failure is attributed to round window closure; one failure is attributed to a loss of perilabyrinthine fluid, and two failures are unexplained. I have not had the opportunity to make tests to determine whether or not these cases represent an end organ deafness.

As previously stated, most of these poor results are obtained in the poor candidates in which extensive oval window surgery is employed in a stupendous effort to give these extremely hard of hearing patients even a slight hearing improvement.

Summary

Stapedectomy and the replacement of the stapes with a graft and an artificial stapes is the most frequently performed operation for deafness in otosclerosis.

Analysis of 1,000 stapes operations indicates the gradual evolution of the technique from total mobilization to total stapedectomy (table 1).

The surgical pathology of otosclerosis is briefly described.

The surgical techniques are outlined for total stapedectomies, partial stapedectomies and stapes reconstructions.

The physiological stapedectomy with preservation of the stapedius tendon is presented as a preliminary report.*

The stainless steel stapes and the auricular tissue graft are preferred because of the more accurate fixation to the incus, the more accurate fixation of the graft in the oval window, the opportunity to preserve the stapedius tendon, and the fact that with a single surgical field the danger of contamination is minimal.

*The stapedius tendon is currently preserved in 76 per cent of cases; as of June 22, 1962, the total series is nearing twelve hundred stapes operations.

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Shrunken Lungs: A Suggestive Sign of Idiopathic Diffuse Interstitial Pulmonary Fibrosis

Manuel Viamonte Jr., M.D.
and John T. Johnson, M.D.
MIAMI

In the roentgenologic evaluation of three cases diagnosed as Hamman-Rich syndrome we have found a common finding not specifically mentioned previously. It is the purpose of this paper to review certain aspects of the ambiguous syndrome, idiopathic diffuse interstitial pulmonary fibrosis, and to present our observations.

In 1935 Louis Hamman and Arnold B. Rich described four unusual cases of pulmonary fibrosis studied at Johns Hopkins Hospital.[1] In 1944 the same authors published a more thorough description of this disease entity. It was described as characterized by a "peculiar progressive diffuse fibrosis of the pulmonary alveolar walls, leading to deficient aeration of the blood with resulting dypsnea and cyanosis and enlargement and eventual failure of the right side of the heart."[2]

From the Department of Radiology of the University of Miami School of Medicine and Jackson Memorial Hospital.

Since the initial description of the disease, many cases have been reported, and each has borne a basic pathologic resemblance to those originally described.

Briefly, the Hamman-Rich syndrome is characterized by unrelenting, progressive dyspnea and paroxysmal unproductive cough.[3] Death from cardiorespiratory insufficiency subsequently ensues. Cor pulmonale is a prominent feature of the disease process and develops in well over 50 per cent of cases in which the disease runs a protracted course. Hemoptysis, cyanosis, clubbing of the fingers and polycythemia are commonly observed. Seldom, however, is there elevation of temperature unless a concomitant pathologic state is present.[4] Leukocytosis is likewise absent, and the sedimentation rate is rarely elevated. Pulmonary function tests usually reveal signs of alveolar capillary block.

The etiology of this process is unknown. No sex preference has been exhibited, and the age of the patients has usually ranged from 20 to 82 years. Even children have been affected.

Ultimately, the diagnosis is established microscopically, and at necroscopy the common ground upon which the basic diagnosis rests is well demonstrated. At autopsy the lungs are heavy and sink in water. They are also dry, firm, and granular and reveal a lacy network of fine fibrous strands. Microscopic sections show diffuse fibrosis of the interstitial tissue resulting in thickened alveolar septa. Interstitial exudate consisting of eosinophils, plasma cells and lymphocytes is usually present, but stainable organisms are seldom observed.

In spite of the constant gross and histological characteristics of the lungs in this condition, there is considerable discrepancy in the life expectancy in individual cases. In the four cases reported by Hamman and Rich[2] in 1944, the course progressed rapidly downhill, and the demise of the patients was a matter of a few months. Subsequent case reports indicate, however, incidences in which the disease followed a much more protracted course, death occurring after a much longer period. Wholey, Good and McDonald[5] referred to one of their patients who was still alive 12 years after the first symptoms were manifest.

The current concept which has evolved is that a chronic as well as an acute form of the disease exists. The term "idiopathic diffuse interstitial pulmonary fibrosis"[5] has likewise been suggested as a preferable descriptive index of the pathologic process and should be used to include "typical" Hamman-Rich syndrome and other similar but not identical conditions.

The roentgen diagnosis of idiopathic diffuse interstitial fibrosis is not an easy one to make. Seldom, in the past, has it been possible to make the correct antemortem diagnosis, short of surgical biopsy. The following list demonstrates the variabilities and inconsistencies of the radiographic findings in this disease:

A. Lungs

1. Opacities—strandlike or patchy in configuration, usually irregularly distributed throughout the lungs and becoming more numerous as the disease progresses.
2. Nodulations and reticulations—fine or coarse, tending to coalesce.
3. Bronchovascular markings—indistinct, especially in the medial aspect of the lung fields.
4. Distribution—inconstant; may involve any segment, but is usually bilateral, and as the disease progresses extensive involvement of both lungs is usually seen.

B. Mediastinum

1. Hilum—usually pulmonary artery dilatation and/or lymphadenopathies; distortion and rotation due to cicatrix commonly observed.
2. Heart—normal to slightly enlarged; pulmonary artery segment variable but moderately prominent, as a rule.



Fig. 1. Case 1.—Roentgenogram of the lungs of a 31 year old woman on April 29, 1959, showing the Hamman-Rich syndrome. There is ill-defined symmetrical haziness of the lower lobes with hyperaeration of the upper lobes. The costophrenic and cardiophrenic angles are blunted, and the lungs are expanded to eight and one-half ribs. The hilar shadows are prominent.



Fig. 2. Case 1.—View on Aug. 4, 1960, showing marked restriction of diaphragmatic motion to less than one-half interspace. There has been progressive shrinkage of the middle and lower lobes with downward displacement of the minor fissure. There is progressive involvement of the left upper lobe.



Fig. 3. Case 1.—View showing close-up of right lung revealing detail.



Fig. 4. Case 2.—Roentgenogram showing the Hamman-Rich syndrome in a 50 year old patient. The shrunken appearance of the lungs is again noted with asymmetrical coarse interstitial fibrosis.

C. Pleura

1. Costophrenic angles—sharp or blunted, depending on the degree of pleural thickening or effusion.

D. Diaphragms

1. Normal in position or elevated but rarely depressed.
2. Motion—normal or restricted.
3. Outline—sharp or indistinct and may be partially obliterated because of overlying lung opacities.

General radiographic appearance in different stages of the disease:

1. Early stage—involvement of the lungs usually bilateral, symmetrical or asymmetrical.
2. Intermediate stage—partial resolution may be evident, appearance may become stable, or progressive involvement becomes apparent, the first two occurring more frequently after steroid therapy.
3. Late stage—lungs appearing to shrink progressively.

It is readily apparent from this description that only rarely will the radiographic findings be so explicit or in such favorable combination as to enable the radiologist to make the correct diagnosis from the roentgenogram alone.

The difficulty of interpretation is only enhanced by the fact that other disease entities may present an almost identical roentgenologic picture. Such a list includes sarcoidosis, histiocytosis, fungus diseases, pulmonary alveolar proteinosis, collagen diseases, bronchiolar carcinoma, muscular cirrhosis of the lung, lymphangitic spread of carcinoma and aspiration, allergic and infectious pneumonitides.

Three cases of this unusual and bizarre syndrome have been brought to our attention recently. The correct diagnosis was suggested in all of them, and this impression was in part based on a diagnostic finding which appeared in all three roentgenograms (figs. 1-5). In case 1 the diagnosis was confirmed by lung biopsy and in cases 2 and 3 by postmortem examination. A summary of the positive radiographic findings in these cases is as follows:

1. Diminished vertical diameter of the lungs.
2. Persistent contraction of the lower and middle lobes due to the fibrotic process.

3. Inferior displacement of the minor fissure.
4. Signs of interstitial fibrosis with a predominating linear pattern in the lower lobes and a predominating reticulonodular pattern in the upper lobes.
5. Hyperaerated upper lobes.
6. Sunken appearance of the heart.
7. Restriction of diaphragmatic motion to less than one interspace.
8. Obliteration of the costophrenic and cardiophrenic angles.

The outstanding radiographic feature present in these cases was the shrunken appearance of the lungs.

A partial review of the literature on idiopathic diffuse interstitial pulmonary fibrosis was carried out, and the roentgenograms accompanying the various articles were evaluated objectively for the presence or absence of this sign. The eighth rib posteriorly was selected as the base line for evaluation. Lungs which were noted to expand below this rib level were interpreted as negative. Those at or below the level of the eighth rib posteriorly were regarded as showing a positive sign.

In several of the cases the lungs revealed normal expansion early in the course of the disease. Subsequently, shrinkage became obvious, but expansion still occurred below the eighth rib. In order to maintain objectivity, these cases were termed negative. The table which follows illustrates the results obtained from the study.

Author	Number of Cases	Cases Showing Shrinkage
Callahan, et al[6]	1	0
da Costa, et al[7]	1	0
Golden, et al[8]	1	0
Grant, et al[9]	2	0
Katz, et al[10]	1	0
Peabody, et al[11]	2	1
Peabody, et al[12]	2	2
Peabody, et al[13]	3	2
Pinney, et al[14]	1	0
Potter, et al[15]	1	1
Rubin, et al[16]	1	1
Schechter, M. M.[4]	2	1
Wildberger, et al[17]	1	0
Total	19	8 (42%)

In our review of 13 articles on diffuse idiopathic interstitial pulmonary fibrosis, 42 per cent of the roentgenograms showed shrunken lungs. Reviewing other causes of diffuse pulmonary fibrosis, we have only seen shrunken lungs in a case of pulmonary alveolar proteinosis, in another of rheumatoid pneumonitis and in a third with lupus erythematosus (fig. 6, case 4). Theoretically, any cause of diffuse pulmonary fibrosis may, in time, shrink the lungs. Etiologies other than the idiopathic group probably will cause the demise of the patient before such an anatomic shrinkage occurs.



Fig. 5. Case. 3.—This roentgenogram demonstrating the Hamman-Rich syndrome shows symmetrical reticulonodular interstitial fibrosis with shrunken lungs in a 64 year old man.



Fig. 6. Case. 4.—Lupus erythematosus in a 30 year old woman. Note the pulmonary fibrosis indistinguishable from the Hamman-Rich syndrome, and the shrunken appearance of the lungs.

Summary

The lungs appear to shrink in idiopathic diffuse interstitial pulmonary fibrosis. This sign, in spite of its simplicity, may be of diagnostic

value. and the reader is encouraged to consider this diagnosis when the lungs fail to expand below the eighth rib posteriorly.

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Control of Cough with Chlophedianol Hydrochloride A New Nonnarcotic Antitussive Agent

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Chlophedianol hydrochloride* has had extensive clinical testing as a nonnarcotic antitussive agent since its introduction in Europe in 1957, and in this country in 1958. Clinical reports[1-6] indicate that this agent is a better antitussive than the more commonly used narcotics, codeine or dihydrocodeinone. Chlophedianol hydrochloride is reported to have a more prolonged action, and to be relatively nontoxic, with little or no effect on blood pressure, respiration, or intestinal motility. In clinical practice, cough associated with various etiologies was controlled effectively.[2,4,6] We report here on our experiences with the use of chlophedianol hydrochloride in 420 patients. Our data confirm that chlophedianol is an effective and well accepted antitussive.

*Chlophedianol hydrochloride, supplied as ULO Syrup by Riker Laboratories, Inc., Northridge, Calif.

Chemistry and Pharmacology

Chlophedianol hydrochloride, a new nonnarcotic cough compound (ULO), is alpha-(2-dimethylaminoethyl)-o-chlorobenzhydrol hydrochloride. In animals, chlophedianol has cough suppressant activity comparable to that of the narcotics. Its duration of action is significantly longer, but the onset of maximal therapeutic action is somewhat slower. In addition to cough-suppressant action, the drug exhibits moderate local anesthetic effects and mild anticholinergic action.[6,7] In contrast to the respiratory depressant action of codeine, chlophedianol usually exerts no effect or may exert a stimulating effect.

When injected intravenously, chlophedianol exerts a light pressor effect in rats; in contrast, a transitory depressor effect is seen in dogs. Oral administration does not produce an observable

effect on blood pressure. Intravenous injection in dogs does not produce lessening of intestinal motility until the dosage reaches 2 to 5 mg. per kilogram. In mice oral doses as high as 100 mg. per kilogram do not produce peristalsis-inhibiting action. Long term animal studies have produced no evidence of either tolerance or addiction, and sudden withdrawal after five months' therapy has not produced signs of abnormal behavior or withdrawal symptoms in the experimental animals. Studies in mice, rats, guinea pigs, rabbits, cats and dogs show the acute toxicity to be lower than that of codeine, regardless of the route of administration. Chronic toxicity studies have revealed no deleterious reactions on blood, urine, or hepatic function.[8]

Methods and Materials

Group I. Three hundred and eight male prisoners at a state prison, who complained of cough, most often in association with acute upper respiratory infection, constituted the largest group of this series. Other etiologies for cough included chronic bronchitis, pulmonary tuberculosis and smoker's cough. The patients were treated with three forms of chlophedianol; 123 received syrup, 129 either tablets or capsules, and 56 lozenges. These were all adult males, both Caucasian and Negro.

Group II. This group consisted of 112 patients selected from private practice, all exhibiting cough associated with various conditions. The patients were carefully selected on the basis of their reliability in reporting on the efficiency and action of the drug; in the case of infants the same criterion was used for their parents or attendants. The patients were almost equally divided as to sex and also between Negro and Caucasian. The age range was five to 76 years, divided as follows: five were between 18 months and five years, five between five and 10 years, 11 between 10 and 20 years, and 91 between 21 and 76 years. In addition to cough, upper respiratory infection, bronchitis, pharyngitis, rhinitis, sinusitis and anthra-silicosis were contributing factors. Two or more of these complications were present in some patients. Of the 112 patients, 75 received syrup, 22 capsules or tablets, and 15 lozenges.

In both studies, the same dosage was employed as follows: (1) Syrup (25 mg. per teaspoonful), 1 to 2 teaspoonsful every four hours (in children under six years the dose was a half teaspoonful); (2) Tablets or capsules (25 mg. each), 1 or 2 every four hours; and (3) Lozenges (5 mg. each), 1 lozenge as required, usually every three to five hours. The clinical response was equally good for all forms.

The evaluations in column I for cough control were assigned if either or both of the corresponding actions tested in columns II and III were elicited.

I Evaluation	II Onset of Action	III Duration of Action
Excellent	Less than 30 minutes	4 hours plus
Good	30 to 60 minutes	2 to 4 hours
Fair	1 hour	1 to 2 hours
Poor (none)	1 hour plus	

In both groups, all side actions, including mild side actions which did not necessitate stopping the medication, were noted and recorded. Observations on blood, urine, blood pressure and bowel function were made in group II.

Results

The response in group I (308 prisoners) was: excellent, 59 (19.1 per cent); good, 127 (41.2 per cent); fair 75 (24.6 per cent) and poor, or no response, 47 (15.1 per cent). There were no serious side actions. There were minor side actions in 18 patients (5.8 per cent) consisting of dizziness, nervousness and mild nausea. Fourteen patients discontinued the drug; four patients continued therapy despite the side actions. One patient complained of urinary stoppage after taking four doses. This could not be confirmed, since he stopped taking the drug after the fourth dose and the condition had cleared up when he was examined. While we do not desire to minimize this, it is necessary to take into consideration the mental attitudes of confined men, and the desire for additional personal attention.

Chlophedianol syrup was given to 75 private patients (group II); the clinical response was excellent in 74 and good in the remaining patient. Side actions were reported by three patients and consisted of epigastric burning, nausea, vomiting and dizziness. These were mild in two patients. One patient refused to continue treatment because of side actions, but also reported excellent cough control. Chlophedianol capsules or tablets were given to 22 children, with excellent response in 20, and no response in the other two patients. No side actions were reported by this group. Chlophedianol lozenges were given to 15 patients with excellent response in all, and also with no side actions. One adult patient who did not respond to tablets was given syrup, 2 teaspoonsful at bedtime, with immediate relief lasting for 8 to 10 hours. When side actions were present, they

occurred early in the course of treatment and tended to subside as the drug was continued.

Changes in blood pressure, urine or bowel function were not observed in any patient. There was no evidence of damage to the blood-forming elements as reflected in leukocyte and erythrocyte counts of peripheral blood.

Based upon considerable previous experience with codeine and dihydrocodeinone, our conclusion is that better results were obtained with chlophedianol in a larger number of these 112 patients than would have been anticipated if either codeine or dihydrocodeinone had been administered.

Summary and Conclusions

Our studies confirm the reports of previous investigators. Chlophedianol hydrochloride is a safe, nonnarcotic, and therapeutically effective antitussive in children and adults and has been shown to be effective in both nonproductive and productive cough, of various etiologies. Both acute and chronic coughs responded. The side effects encountered were mild and infrequent, consisting of nervousness and nausea. Side effects rarely necessitated discontinuing the drug. No deleterious effects on blood-forming elements, blood pressure, urinary function, respiration, or bowel function were observed. The onset of action of chlophedianol is more delayed than is that of either codeine or dihydrocodeinone, but the duration of action is significantly longer.

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8. Data supplied by Riker Laboratories, Inc.

Florida State Prison (Dr. Schweem).

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Medical Research at the University of Florida

At the University of Florida College of Medicine research is in progress in all departments. The types of research projects range from those with a fundamental biological approach which may have no immediate clinical application, to those on human beings which have immediate application to specific clinical disease problems. Research is supported by a wide variety of outside agencies both private and public. Preliminary experiments from which publications rarely result are usually conducted with departmental budgeted state funds; research project grant applications to outside agencies are based on these preliminary experiments.

For the fiscal year 1960-1961, 62 research projects have been supported by grants. The total face value of outside grant support for this period is $1,277,402 at the rate of $894,431 yearly. These figures do not include preliminary experiments supported out of regular departmental budgets.

In a report of this length it is impossible to review each project or even to list all of those in progress, or a complete bibliography of all publications. Not all projects have ultimate clinical implications so that many of the important basic projects have not been included in this review. In addition to individual research projects, many programs in research training are in progress. These training grants are intended ultimately to provide professional personnel for conducting future research in this and other medical schools by training individuals in research design, techniques and approach. No specific research projects are expected to be prosecuted and hence no summary of research training grants is included in this report. The yearly value of training grants is an additional $612,321. Research in educational methods is also in progress, but no attempt is made in this report to summarize the projects or findings.

The following brief summaries have been prepared on selected projects which have reached a stage of completion justifying publication. It should be kept in mind that many of these projects are continuing and that no attempt has been made to summarize work in progress. Other projects are of a long term nature, so that no publishable results have yet been accumulated. Premature publication of tentative conclusions is many times harmful as more extended experiments do not bear out the initial promise, or change the emphasis and interpretation. For that reason only those publications which have already appeared in accepted journals have been reviewed. The summaries are organized alphabetically by the department of the senior author rather than by subject matter. Many of the authors are medical or graduate students. Only the most important papers have been summarized, although others have been listed in the bibliography. Purely clinical papers and general reviews have not been included.

Anatomy

A group in the Department of Anatomy has been studying the localization of venom labeled with radioactive iodine. Various routes for the administration of antivenin, the effect of antivenin, incision and suction, cold and the use of corticosteroids have been studied. The venom of the diamondback rattlesnake was injected into mice. Polyvalent antivenin gave marked protec-

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tion against death and local necrosis produced by enzymes in the venom. Polyvalent gas gangrene and tetanus antitoxin offered no protection against necrosis. Snake venom is relatively sterile and spore-forming anaerobic bacteria were not grown. The addition of antitoxins to antivenin therapy is unnecessary and may be contraindicated unless evidence of clostridial contamination exists.

Fischer, F. J.; Ramsey, H. W.; Simon, J., and Gennaro, J. F., Jr.: Antivenin and Antitoxin in the Treatment of Experimental Rattlesnake Venom Intoxication (Crotalus Adamanteus), Am. J. Trop. Med. 10:75-79 (Jan.) 1961.

Another group has been studying functional localization in the cerebellum of various species of animals. Electrodes were permanently implanted in the unanesthetized albino rat. The longitudinal corticonuclear zone theory of cerebellar function was supported. Certain data in the literature concerning cerebellar function of the cat and monkey were compared with those obtained from the rat. A theory concerning the evolution of cerebellar hemispheric function was advanced.

Goodman, D. C., and Simpson, J. T. Jr.: Functional Localization in the Cerebellum of the Albino Rat, Exp. Neurol. 3:174-188 (Feb.) 1961.

Another group has been studying changes in various organs of animals maintained on deficient diets. Young rats were maintained on a Vitamin B_{12}-deficient diet. Morphologic and chemical studies were made of the vital organs. A transient accumulation of lipid in the kidney tubules was found and postulated as the cause of the high mortality encountered in such deficient animals.

Johnson, E. M.: Histologic Changes in the Early Postnatal Vitamin B_{12}-Deficient Rat, Anat. Rec. 139:242 (Feb.) 1961.

Another group in this department has been conducting extensive experiments on the production of congenital defects in experimental animals. In rats, several methods including maternal Vitamin A, folic acid or riboflavin deficiency, X-irradiation of the embryos of pregnant animals, the injection during pregnancy of the vital dye, trypan blue, and the exposure of the mother to excess concentrations of carbon dioxide in inspired air, induced congenital cardiovascular defects. The types of malformations produced by these methods and the advantages and disadvantages of each for experimental studies on congenital heart disease were discussed.

Wilson, J. G.: Experimental Production of Congenital Cardiac Defects, Congen. Heart Dis., pp. 65-82, 1960.

Beaudoin, A. R., and Pickering, M. J.: Teratogenic Activity of Several Synthetic Compounds Structurally Related to Trypan Blue, Anat. Rec. 137:297-306 (July) 1960.

Biochemistry

Several groups of investigators in this department have been studying the alterations in blood proteins in disease. Extensive differences are seen in the chromatograms of peptides resulting from the enzymatic hydrolysis of Bence-Jones proteins. These differences are further proof of the nonidentity of individual specimens of this class of proteins. Peptide patterns resulting from tryptic hydrolysis of chromatographic fractions of individual Bence-Jones proteins were also different, indicating some degree of nonhomogeneity.

Fried, M., and Putnam, F. W.: Comparative Studies of Partial Hydrolysates of Bence-Jones Proteins, J. Biol. Chem. 235:3472-3477 (Aug.) 1960.

By action of proteolytic enzymes, normal and pathological human γ-globulins were cleaved into several reproducible fragments about one-third the size of the whole molecule. The fragments have different biological properties. This method affords a procedure for identifying the valence sites of antibodies and for comparing segments of the structure of normal and abnormal γ-globulins.

Hsiao, S. H., and Putnam, F. W.: The Cleavage of Human γ-Globulin by Papain, J. Biol. Chem. 236:122-135 (Jan.) 1961.

Phelps, R. A.; Neet, K. E.; Lynn, L. T., and Putnam, F. W.: The Cupric Ion Catalysis of the Cleavage of γ-Globulin and Other Proteins by Hydrogen Peroxide, J. Biol. Chem. 236:96-105 (Jan.) 1961.

Another group is doing studies on bacteria and trying to derive theoretical mathematical formulations as models of biological processes. Formulas and the IBM 650 computer demonstrate that variations in shape from spherical to an ellipsoid with a major to minor axis ratio of 4 would cause a decrease in turbidity of suspensions of about 15 per cent. It was also shown that absorbency measurements employed routinely in bacteriological studies are more nearly a measure of bacterial mass than of bacterial numbers.

Koch, A. L.: Some Calculations on the Turbidity of Mitochondria and Bacteria, Biochem. et biophys. acta 51:429-441 (Apr.) 1961.

Another group has been studying the metabolism of radioactively labeled β-carotene and its conversion to Vitamin A. In the conversion in the intestinal wall of the rat, Vitamin A ester was the major product. Small amounts of retinene, Vitamin A alcohol, and acidic compounds also were formed. The upper two thirds of the small intestine was most active in forming Vitamin A ester. The formation of Vitamin A ester from well dispersed solutions of β-carotene and Tween 20 occurred only in the presence of bile. Glycocholate fully substituted for bile but deoxycholic acid was inactive. The conversion of β-carotene Vitamin A ester was inhibited by retinene and Vitamin A, whereas semicarbazide had no effect.

Olson, J. A.: The Conversion of Radioactive β-Carotene into Vitamin A by the Rat Intestine In Vivo, J. Biol. Chem. 236:349-356 (Feb.) 1961.

Another group has been studying the metabolism of various tissues. Slices of the liver, spleen, intestine and bone marrow from human autopsy material were incubated with 2-C^{14}-glycine and culture media for different times. The incorporation of the radioactively labeled material suggested that cirrhotic liver made less albumin and more γ-globulin than normal tissue.

Migita, S.: Uber Die Inkorporation von 2-^{14} C-Glykokoll in Albumin, γ-Globulin und in Mikrosomen der Menschlichen Leber, sowie Verschiedener Organe von Hunden, unter Normalen und Pathologischen Bedingungen (in vitro Versuch), in: Protides of the Biological Fluids, pp. 238-244, 1961.

In cases of the nephrotic syndrome in man, transferrin was excreted into the urine and decreased in the serum. Statistical analysis suggested a positive correlation between the excretion of transferrin and anemia.

Masuya, T., and Migita, S.: Anemia in the Kidney Diseases, J. Clin. Hematology 3:129-143 (Mar.) 1961.

Medicine

One group has been studying neuronal discharge phenomena in the epileptic process. A cell in the chronic epileptic focus may cease to be active during a maximal spontaneous seizure in spite of markedly augmented background of patterned "tonic-clonic" sequences.

Schmidt, R. P.: (Disc) Basic Mechanisms of the Epileptic Discharge, Epilepsia, Ser. 4, 2:89-90 (Mar.) 1961.

Samples of venous blood were obtained at catheterization from various sites in 10 patients with sickle cell anemia and two patients with sickle cell hemoglobin C disease. The numbers of sickle cells were remarkably constant from one site to another despite moderate differences in oxygen content. Arterial blood obtained at puncture always contained fewer sickle cells than venous blood. Intravenous administration of sodium bicarbonate had no effect on the number of sickle cells found. The number of sickle cells could not be correlated with the clinical severity of the disease.

Jensen, W. N.; Rucknagel, D. L., and Taylor, W. J.: In Vivo Study of the Sickle Cell Phenomenon, J. Lab. & Clin. Med. 56:845-865 (Dec.) 1960.

Another group has been studying calcium metabolism. Cartilage matrix from rachitic rats mineralizes in vitro. The degree of mineralization varies directly with the concentration of calcium. The addition of organic or amino acids known to form chelates was found to inhibit matrix mineralization. Cartilage requires calcium in a readily available ionic form for mineralization. Dissociation constants were calculated for citrate, tartrate, malonate, succinate and glutamate calcium chelates. The histochemical characteristics of bone matrix and osteoid in experimental low phosphorus, low calcium, and hypervitaminosis D rickets were studied in rats. The data indicate that osteoid differs from bone matrix.

Thomas, W. C., Jr., and Pickett, W. C.: Affinity of Cartilage Matrix for Calcium, Am. J. Physiol. 199:103-106 (July) 1960.

Thomas, W. C., Jr.: Comparative Studies on Bone Matrix and Osteoid by Histochemical Techniques, J. Bone & Joint. Surg. 43-A: 419-427 (Apr.) 1961.

Isolated rat hearts were perfused with C^{14} labeled palmitic acid. The difference between substrate uptake and utilization is stressed. Fatty acid plays a major role as an energy source for myocardium.

Shipp, J. C., and Opie, L.: Importance of Free Fatty Acid as Energy Source for Myocardium in Perfused Rat Heart, Circulation 22: 809 (Oct.) 1960.

Shipp, J. C.; Opie, L., and Challoner, D.: Fatty Acid and Glucose Metabolism Studied with Radio-isotopes in Isolated, Perfused Heart, Nature 189:1018-1019 (Mar.) 1961.

Phonocardiographic studies in ventricular septal defect have already been reported in this journal.

Crevasse, L.: Ventricular Septal Defect: An Ausculatory and Phonocardiographic Study of 50 Cases, J. Florida M. A. 47:408-411 (Oct.) 1960.

Microbiology

Alterations in the rate of respiration of infected HeLa cells occurred concomitantly with maximal production of polio virus. This method for rapid measurement of cell destruction by cytopathic poliovirus is based upon the rate of oxygen uptake of the infected cell population. Quantification of the yield of virus as well as the length of the latent period could be readily made.

Gifford, G. E.: Manometric Measurement of a Cell-Virus Relationship, Arch. f. Virusforschung 10:478-489 (Oct.) 1960.

Time lapse photomicrographs by phase contrast techniques of nuclear and cellular division of bacteria were studied. Synchronization of cell division with synchronization of nuclear division occurred. It was timed after the middle of the cell division cycle.

Schaechter, M.; Williamson, J. P., and Hood, J. R.: On the Timing of Nuclear and Cellular Division in Bacteria, Bact. Proc., p. 79 (Apr.) 1961.

Acquired immunity to tuberculosis can be explained by alterations in activity of reticuloendothelial cells toward mycobacteria. Intracellular multiplication of the tubercle bacilli in vitro is inhibited in macrophages from immune animals. Such cells have a heightened level of esterases, such as acid phosphatase, and increased susceptibility to tuberculin. Some protection, as measured by increased resistance to a challenge infection, can be transferred to normal animals by means of cells from immunized animals. Transfer of immunity can be achieved successfully with cells from spleen, peritoneal exudate, or lymph node. This evidence supports the idea that immunity in tuberculosis is based on cellular interactions, but it is not known whether the factor acquired by such cells is an antibody, enzyme, or inhibiting substance.

Suter, E., and Hulliger, L.: Non-Specific and Specific Cellular Reactions to Infections, Ann. New York Acad. Sc. 88:1237-1245 (June) 1960.

Suter, E.: Passive Transfer of Acquired Resistance to Infection With Mycobacterium Tuberculosis by Means of Cells, Amer. Rev. Resp. Dis. 83:535-543 (Apr.) 1961.

Injections of serum from "immune" mice into mice infected with Schistosoma mansoni do not significantly reduce the production of eggs by the parasite nor alter the distribution of eggs in the tissues of the mouse host.

Weinmann, C. J., and Hunter, G. W.: Studies on Schistosomiasis, XVI, The Effect of Immune Serum Upon Egg Production by *Shistosoma Mansoni* in Mice, Exper. Parasitol. 11:56-62 (Feb.) 1961.

Obstetrics and Gynecology

One group has been studying the gas exchange in pregnancy. They have considered the placenta as a fetal lung and have then applied the reasoning and techniques of pulmonary physiologists with emphasis upon the concentration of pressure gradients of oxygen and carbon dioxide between the maternal and fetal circulations. Studies have been done on several different species of animals. The llama has a six-layered epitheliochorial placenta. The oxygen dissociation curves of the maternal and fetal bloods of the llama show a high saturation at low oxygen pressures. The hypothesis that the thicker placental types are necessarily associated with steep transplacental gradients in oxygen pressure appears to be without foundation.

Meschia, G.; Prystowsky, H.; Hellegers, A.; Huckabee, W.; Metcalfe, J., and Barron, D. H.: Observations on the Oxygen Supply to the Fetal Llama, Quart. J. Exper. Physiol. 45:284-291 (July) 1960.

Studies were made on sheep at sea level and in the high Andean pastures at about 14,000 feet. elevation. The plasma volume expressed as per cent of fetal weight is not regularly increased above the values recorded at sea level. The hematocrit levels of the fetuses of the ewes at altitude were higher with one exception than the levels reported for sea level. As a result of the larger hematocrit value the blood volume circulating through the fetus and placenta is higher in proportion to the fetal weight than it is in the fetuses of comparable size and age carried by ewes at sea level.

Prystowsky, H.; Hellegers, A.; Meschia, G.; Metcalfe, J.; Huckabee, W., and Barron, D. H.: The Blood Volume of Fetuses Carried by Ewes at High Altitude, Quart. J. Exper. Physiol. 45:292-297 (July) 1960.

Another group has been studying steroid metabolism. The hexosemonophosphate shunt and the synthesis of fatty acids in female rats were greater than in corresponding littermate males. It is possible that primary inhibition of the adrenal by estrogen leads to a "feedback" increase in the release of corticotropin and prolactin from the pituitary. The increase in these tropins may account for the increased HMP shunt metabolism in fatty tissue after small doses of estrogen to the intact rat, and in female rats as compared with males.

McKerns, K. W., and Bell, P. H.: The Mechanism of Action of Estrogenic Hormones on Metabolism, Recent Progr. Hormone Res. 16:97-119 (July) 1960.

Pathology

One group has been studying tissue enzymes in various conditions. On the fifth day after infection of animals with Leptospira, histochemical tests showed a marked decrease in alkaline phosphatase and in lactic, malic, glutamic, isocitric and succinic dehydrogenase in the kidney and liver. These chemical changes correlated well with the onset of jaundice and renal failure. The histochemical lesions were patchy in distribution, suggesting that focal anoxia may be instrumental in the genesis of tissue damage in this infection.

Arean, V. M., and Henry, J. B.: Biochemical and Histochemical Observations on the Kidney, Liver and Serum of Guinea Pigs Experimentally Infected with Leptospira Ictero-Hemorrhagiae, Proc. Am. A. Path. & Bact. (Apr.) 1961.

The urine of 12 patients with moderately to far advanced malignant melanoma was studied for the presence of chromogens convertible into melanin in the presence of oxygen. Positive results were obtained in only two of 12 patients, utilizing three of the most commonly employed tests. These tests are not sufficiently sensitive to be of more use in making the diagnosis of melanoma than simple observation of the urine for blackening on exposure to air.

Beeler, M. R., and Henry, J. B.: Melanogenuria—Evaluation of Several Commonly Used Laboratory Procedures, J. A. M. A. 176:136-138 (Apr. 8) 1961.

Another group has been studying characteristics of tumor cells in vivo after the injection of labeled materials. Mice were injected with tritiated thymidine and radioautographs of tissues from various organs were studied to assess the relative rates of renewal in 34 different types of cells. The characteristic distribution pattern of cells synthesizing DNA within various organs and tissues was studied.

Edwards, J. L., and Klein, R. E.: Cell Renewal in Adult Mouse Tissues, Am. J. Path. 38:437-453 (Apr.) 1961.

Pediatrics

A newborn infant with muscular weakness presented manifestations of both the "neonatal" and "congenital" varieties of myasthenia gravis. Repeated prompt and dramatic response to neostigmine was demonstrated with a lack of response to injections of saline solution as a control. The diagnosis of myasthenia gravis is of importance in newborn children in distress.

Greer, M., and Schotland, M.: Myasthenia Gravis in the Newborn, Pediat. 26:101-108 (July) 1960.

Another group has been studying disorders of metabolism which are genetically transmitted. In the human syndrome of gargoylism or Hurler's syndrome, the storage material found in autopsy specimens is acid mucopolysaccharide. This syndrome is genetically transmitted. The relationship to similar biochemical defects in related human disease is discussed. A defect in cattle, producing dwarf animals with heavily labored breathing, is described. These "snorter dwarfs" have altered mucopolysaccharide metabolism which resembles the human Hurler syndrome.

Lorincz, A. E.: Heritable Disorders of Acid Mucopolysaccharide Metabolism in Humans and in Snorter Dwarf Cattle, Ann. New York Acad. Sc. 91:644-658 (June) 1961.

Wolfson, S.; Kahana, L.; Harris, J. S., and Lorincz, A. E.: Biochemical and Roentgenographic Response to Long-Term Corticosteroid Therapy in the Hurler Syndrome, Am. J. Dis. Child. 102:638 (May) 1961.

Angiocardiographic studies have been done on patients with supravalvular stenosing ring of the left atrium. This rare congenital cardiac defect has been studied in one autopsy case and two probable clinical cases. Only one possible diagnostic clue has been uncovered—delayed emptying of the left atrium on angiocardiographic study.

Manubens, R.; Krovetz, L. J., and Adams, P.: Supravalvular Stenosing Ring of the Left Atrium, Am. Heart J. 60:286-295 (Aug.) 1960.

Another group has been studying the development of immune processes in infancy. Experiments have been done in several species including the newborn rabbit and the results compared with the response in adult animals. The state of tolerance to protein antigens requires a threshold of antigen in the body either persisting from birth or supplied as continuous or intermittent increments. Provided this threshold is sustained, tolerance is evident upon antigenic challenge. When the elapsed time permits catabolic processes to deplete the antigen to a level below this threshold, a normal immune response to the antigen is induced. The newborn and young human infant differ greatly in immunologic status from their more mature counterparts. The differences are both qualitative in the types of immune mechanisms activated and quantitative in the levels of immunity achieved. In many respects the infant is more adequate than is usually believed, and is capable of responding specifically to infection as well as to active immunization. The infant is dependent upon passively acquired antibodies from the mother to cover some of the immunologic inadequacies, but this protection has limitations. Active immunization of human infants with typhoid vaccine has been studied in 150 premature and full term infants. Actively formed "H" agglutinins were found one week after injection in over half of the infants up to 30 days of age. The "H" agglutinin actively formed in the newborn infant is a macroglobulin which migrates on electrophoresis and sediments on ultracentrifugation at a different rate than the passively acquired "H" agglutinin.

Smith, R. T.: Studies on the Mechanism of Immune Tolerance, Proc. Symp. Mec. Antibody Formation, Czechoslovakian Acad. of Sc., pp. 313-328, 1960.

Smith, R. T.: Immunity in Infancy, Pediat. Clin. North America 7:269-293 (May) 1960.

Smith, R. T.: Response to Active Immunization of Human Infants During the Neonatal Period, Ciba Found. Symp. Cellular Aspects of Immunity, pp. 348-368, 1960.

Pharmacology and Therapeutics

The albumin-bound fraction of a chemotherapeutic agent (sulfonamide) is devoid of antibacterial action. Drugs of the class of the phenylbutazones were found to interfere significantly with the binding.

Anton, A. H.: The Relation Between the Binding of Sulfonamides to Albumin and Their Antibacterial Efficacy, J. Pharmacol. & Exper. Therap. 129:282-290 (July) 1960.

Although aminophylline elicits renal excretion of the same ions as does hydrochlorothiazide, it was found that the effects of these two drugs are additive. Mercurials, aminophylline, hydrochlorothiazide and carbonic anhydrase inhibitors each have a different mechanism of action.

Nechay, B. R.: Aminophylline and its Relationship to Some Other Diuretic Agents in Dogs, J. Pharmacol. & Exper. Therap. 132:339-344 (Apr.) 1961.

A large number of studies on carbonic anhydrase have been done by several groups of investigators in this department. The inhibition of carbonic anhydrase by acetazolamide was found to be noncompetitive and reversible. Carbonic anhydrase was found in high concentrations in the secretory epithelium of the inner ear. Acetazolamide altered the composition and possibly the pressure of the endolymph. This finding may have possible implications with respect to Meniere's disease.

Systemic acidosis reduces intraocular pressure and is additive to the local effect of acetazolamide. These experiments indicate why chronic use of the drug in glaucoma is not attended by drug resistance. Nine carbonic anhydrase inhibitors were studied for the effects on intraocular pressure in the rabbit. It was concluded that the lowering of intraocular pressure is solely due to inhibition of carbonic anhydrase, probably in secretory cells of the ciliary process.

Young human patients with chronic hydrocephalus were studied for the acute and chronic effect of acetazolamide administration. In those patients who had elevated cerebral spinal fluid pressure, but were fairly well stabilized, the long term effect of the drug was to reduce pressure. Electrolyte measurements were also made on plasma and cerebral spinal fluid.

Leibman, K. C.; Alford, D., and Boudet, R.: Nature of the Inhibition of Carbonic Anhydrase by Acetazolamide and Benzthiazide, J. Pharmacol. & Exper. Therap. 131:271-274 (Mar.) 1961.

Wistrand, P. J., and Maren, T. H.: The Effect of Carbonic Anhydrase Inhibition on Intraocular Pressure in Rabbits with Different Blood Co_2 Equilibria, Am. J. Ophth. 50:291-296 (Aug.) 1960.

Physiology

One group is doing long range studies on respiration. Cerebral succinic dehydrogenase and cytochrome oxidase activities are very low at birth in the rabbit. These enzymes reach adult levels at 15 to 18 days postnatally, when the tolerance to anoxia becomes as poor as that of the adult.

Otis, A. B.: Respiration, External, Encyclo. Sc. & Techno., pp. 509-510, 1960.

Another group has been studying endocrine interrelationships in the maintenance of body temperature. Rats were restrained and exposed to air at 5° centigrade. After adrenalectomy, graded doses of cortisone acetate with various doses of thyroxine demonstrated an interaction between the two hormones in the regulation of body temperature during exposure to cold.

Fregly, M. J.: Interaction of Adrenals and Thyroid in Maintenance of Body Temperature of Rats Exposed to Cold, Am. J. Physiol. 199:437-444 (Sept.) 1960.

Fregly, M. J.; Iampietro, P. G., and Otis, A. B.: Effect of Hypothyroidism on Heat Production and Heat Loss During Acute Exposure to Cold, J. Appl. Physiol. 16:127-132 (Jan.) 1961.

Another group is studying the relationship of various endocrines to hypertension in the rat. Antithyroid drugs prevented the development of elevated blood pressure and cardiac hypertrophy after encapsulation of kidneys with latex envelopes.

Fregly, M. J., and Cook, K. M.: Role of the Thyroid Gland in Development and Maintenance of Renal Hypertension in Rats, Acta endocrinol. 34:411-429 (July) 1960.

Fregly, M. J.: Gennaro, J. F., and Otis, A. B.: Effect of Treatment with Radioactive Iodine and Iodine Deficient Diet on Development and Maintenance of Renal Hypertension in Rats, Circulation Research 8:749-758 (July) 1960.

Another group is studying single motor nerve fibers. A frog nerve fiber was immersed in high concentrations of potassium chloride and a polarizing electrical current applied. The excitable membrane may respond to stimulation with two quite different and separate kinds of action potential: one associated with sodium and the other with potassium when this ion is in high concentration.

Wright, E. B., and Ooyama, H.: Effect of Potassium on Membrane Current in Single Ranvier Node During Excitation, Proc. Soc. Exper. Biol. & Med. 106:387-391 (Feb.) 1961.

Wright, E. B., and Ogata, M.: Intracellular Recording of Neuromuscular Junction Potential in Single Isolated Nerve-Muscle, J. Neurophysiol. 23:646-658 (Nov.) 1960.

Psychiatry

The realistic unit in the administration and management in a nuclear attack is the nation as a whole. In utilizing the system planning approach, it must be recognized that American society consists of a myriad of interlocking groups and organizations whose interrelationships provide order, meaning, and continuity to our normal social life. Use of these existing groups as the unit for shelter taking, shelter stay, and approach to postshelter recovery and reconstruction is likely to achieve a viable organized society in the post-attack period.

Fritz, C. E.: Some Implications from Disaster Research for a National Shelter Program, Symp. Human Problems in the Utilization of Fallout Shelters, Nat. Acad. Sc.-Nat. Research Council, Pub. 800, pp. 139-156, 1960.

Fritz, C. E.: Disaster, Contemporary Soc. Prob., Chpt. 14, New York, Harcourt, Brace & World, pp. 651-694, 1961.

Four out of 10 patients seen in the general clinic suffer from personality disturbances sufficient for psychiatric referral. These patients are probably representative of general clinical practice. In the course of a three year experience in the study of behavior of normal children in a school setting, medical students have learned to become more objective in viewing human behavior. They have learned to apply the scientific approach to behavior and have developed more sensitivity in the meaning of behavior of children.

Gordon, I. J.; Regan, P. F., and Martin, S. P.: Observation of the Behavior of Normal Children, an Approach to Medical Education, J. Med. Educ. 35:775-780 (Aug.) 1960.

Studies on the attitudes of auxiliary personnel working with psychiatrists during the course of two types of coma therapy have been compared. Personnel look on the insulin technique as reflecting loving and care attitudes. They perceive electroconvulsive therapy as punitive and controlling.

Ruffin, W. C., Jr.; Monroe, J. T., and Rader, G. E.: Attitudes of Auxiliary Personnel Administering Electroconvulsive and Insulin Coma Treatment—A Comparative Study, J. Nerv. & Ment. Dis. 131:241-246 (Sept.) 1960.

Radiology

Avulsion of the medial epicondylar epiphysis may occur with maximum effort in Little League pitchers. Displacement of this epiphysis for any reason is most common in Little League age groups. Treatment varies from internal fixation to restriction of activity.

Brogdon, B. G., and Crow, N. E.: Treatment of Little Leaguer's Elbow, Modern Med. 28:122-123 (Sept.) 1960.

The various technical factors which must be controlled to perform and interpret thyroid scans are described.

Williams, C. M.: Thyroid Scanning, U.S. Govt. Print. Off., 1-100, (July) 1960.

A group is studying the metabolism of various chemical substances to end products in the urine. Monamine oxidase inhibitors and catechol-o-methyl transferase inhibitors both inhibit the metabolism of dopamine to homovanillic acid. Experiments with labeled intermediates indicate that 80 per cent of exogenous dopamine is converted to homovanillic acid via 3-4, dihydroxyphenylacetic acid and 20 per cent is converted to homovanillic acid via 3-methoxytyramine.

Williams, C. M.; Babuscio, A. A., and Watson, R.: In Vivo Alteration of the Pathways of Dopamine Metabolism, Am. J. Physiol. 199:722-726 (Oct.) 1960.

Excretion of homovanillic acid in patients with Huntington's chorea is not different from normal controls, indicating the metabolism of dopamine is normal in this disease.

Williams, C. M.; Maury, S., and Kibler, R. F.: Normal Excretion of Homovanillic Acid in Patients with Huntington's Chorea, J. Neurochem. 6:127-129 (Feb.) 1961.

A method for the determination of aromatic acids by gas-liquid chromatography utilizes the conversion of the acids to their volatile methyl esters with diazomethane. Gas-liquid chromatography has been used for the qualitative study of the aromatic acids in a case of malignant carcinoid.

Sweeley, C. C., and Williams, C. M.: Gas Chromatography of Urinary Aromatic Acids, Federation Proc. 20:5 (Apr.) 1961.

Sweeley, C. C., and Williams, C. M.: Microanalytical Determination of Urinary Aromatic Acids by Gas Chromatography, Analytical Biochem. 2:83-86 (Feb.) 1961.

Another group is studying mathematical models for medical diagnosis. Various methods of multivariate analysis have been considered as models for diagnosis of disease by a computer. A factor analysis model has been analyzed for the diagnosis of thyroid disease and a theoretical example is solved by its use.

Overall, J. E., and Williams, C. M.: Models for Medical Diagnosis, Behavioral Sc. 6:134-141 (Apr.) 1961.

Overall, J. E., and Williams, C. M.: Models for Medical Diagnosis: Factor Analysis, 1. Theoretical, Medizinische Dokumentation 5:51-56 (Apr.) 1961.

Mice received a single dose of 700 r of x-rays at eight weeks of age. Livers showed a high proportion of chromosomal abnormality which decreased slowly over a six month period. Mice given intraperitoneal injections weekly of nitrogen mustard for 14 months showed a slightly greater number of abnormalities over saline controls.

Stevenson, K. G., and Curtis, H. J.: Chromosomal Aberrations in Irradiated and Nitrogen-Mustard Treated Mice, (abs) Radiation Research 14:506 (Apr.) 1961.

Stages of various mesenteric artery lesions were studied after aortograms or barium ingestion.

Reeves, J. D., and Wang, C. C.: The Stages of Mesenteric Artery Disease, South M. J. 54:541-548 (May) 1961.

Surgery

One group has been studying the pharmacologic action of autonomic drugs. Cyclopropane is a synergist to epinephrine in the contraction of smooth muscle. The synergism between a vasopressor and an anesthetic agent explains many clinical observations.

Gravenstein, J. S.; Sherman, E. T., and Andersen, T. W.: Cyclopropane-Epinephrine Interaction on the Nictitating Membrane of the Spinal Cat, J. Pharmacol. & Exper. Therap. 129:428-432 (Aug.) 1960.

A group has been studying lipid metabolism in various human conditions. Segments of arteries removed from patients after injection with radioactively labeled phosphate showed active incorporation of P^{32} into the phospholipids of intima and adventitia. Comparison of specific activities of arterial plaques and plasma phospholipids suggests that arterial phospholipids are partly derived from synthesis by the arterial wall.

Zilversmit, D. B.; McCandless E.; Jordan, P.; Henley, W. S., and Ackerman, R. P.: The Synthesis of Phospholipids in Human Atheromatous Lesions, Circulation 23:370-375 (Mar.) 1961.

Endocrine studies were done on a very unusual case of congenital hypertrichosis and macrogingivae in a young girl in whom subsequently massive enlargement of both breasts developed due to giant fibroadenomata. No endocrine abnormalities were detected.

Byars, L. T., and Jurkiewicz, M. J.: Congenital Macrogingivae and Hypertrichosis with Subsequent Giant Fibroadenomas of the Breasts, J. Plas. Reconst. Surg. 27:608-612 (June) 1961.

A group has been conducting extensive experiments on localization of various functions in the cerebral cortex. In the cat and monkey the cortical representation of hearing has been found in temporal and insular areas as well as suprasylvian and anterior lateral gyri and part of the motor region. Sound localization and pattern discrimination are affected by cortical lesions. The results obtained in animals have been confirmed to a much lesser extent in man.

Roberts, L.: The Cerebral Cortex and Hearing, Ann. Otol., Rhin, & Laryng. 69:830-848 (Sept.) 1960.

A group of older patients who underwent major intrathoracic operations were studied in relation to the use of digitalis in the postoperative course. Intrathoracic resections in 20 to 30 per cent of patients over 60 are followed by cardiac complications which occur most frequently following pneumonectomy. Cardiac complications usually occur within the first week following surgery and are predominantly atrial fibrillation or flutter. They can be reduced in patients over the age of 55 by prophylactic preoperative digitalization.

Wheat, M. W., and Burford, T. H.: Digitalis in Surgery: Extension of Classical Indications, J. Thoracic Surg. 41:162-168 (Feb.) 1961.

Another group has been studying gastrointestinal physiology over a long period of time. Twenty-two patients were treated by revisional surgery aimed at slowing gastric emptying and increasing gastric reservoir capacity. Sixteen of these obtained a satisfactory result in a follow-up of two to seven years.

Woodward, E. R., and Hastings, N.: Surgical Treatment of the Postgastrectomy Dumping Syndrome, Surg. Gynec. & Obst. 3:429-437 (July) 1960.

Alcohol was found to have no effect on pancreatic secretion in dogs following total gastrectomy. Alcohol stimulates gastric acid secretion which enters the duodenum to activate the secretin mechanism indirectly.

Walton, B. E.; Schapiro, H., and Woodward, E. R.: The Effect of Alcohol on Pancreatic Secretion, Surg. Forum 11:365-367 (Oct.) 1960.

Fresh heterogenous bone transplants from rat to hamster evoke a histologically detectable inflammatory response. Extracts of donor bone injected percutaneously into the recipient in the immediate post-transplant period produced a more intense and accelerated rejection response.

Siegrist, W. H., and Enneking, W. F.: Histological Aspects of Heterogenous Bone Transplantation, Transplan. Bull. 27:437-440 (Apr.) 1961.

President's Page

Better Understanding

Most people are reasonable. Reasonable people, given the same facts, are likely to come to reasonable, and often very similar, conclusions. This is not a very profound statement, but it is surprising how often it is true and even more surprising how often the truth of it is ignored. It is not an original observation that most people distrust, if not fear, the unknown. This applies particularly when the unknown is people. It is contrary to human nature to expect some unknown person to be as intelligent, as upright, as honest, or as honorable as one feels himself to be. Conversely, one is inclined always to give his friends the benefit of the doubt. The condescension implied in the term "L.M.D." commonly used by interns and residents to designate the unknown referring doctor on the "outside" is all too evident. The house staff generally accords its own attending staff at least a modicum of respect.

This innate distrust can have a seriously disruptive effect on an organization such as the Florida Medical Association. Several years ago the Blue Shield management became so involved in the business of management that it lost contact with its participating physicians with the result that there was widespread misunderstanding and distrust of Blue Shield. Fortunately, this situation has been corrected with improved communication and better rapport between Blue Shield and the medical profession. More recently, the actions of the Committee on Fee Schedules have been suspect because very few doctors understood the complexity of the problems involved in the negotiation of a multimillion dollar fee schedule. Again, with more general appreciation of the problem has come understanding. My own experience has been that almost invariably doctors in responsible positions act responsibly, and when they appear to do otherwise, it is usually because I do not know all the facts.

In order that you may know more about those doctors who have been entrusted with directing the affairs of the Association in the interim between meetings of the House of Delegates, the Editor of our Journal has printed in this issue biographical sketches and pictures of each of them. It has been my pleasure to know all of these gentlemen, except one, for many years—one since childhood, three since college days, and the remainder for the past 10 to 20 years. I have found that to know these men is to respect them and, while all of them are widely known throughout the state, I hope that this presentation will be a means for more doctors becoming better acquainted with them. Eight of the 13 Governors are members of the Board by virtue of being elected to an office by the House of Delegates. Each year the President appoints one member to represent one of the four medical districts for a four year term and one member to represent the state-at-large for a one year term. The other three members representing the other three medical districts are holdover appointees of previous Presidents.

The Board is required to meet not less than four times a year. The directives of the House of Delegates are mandatory, and all Board actions between sessions of the House must be in harmony with previous actions by this body and must be ratified at the next meeting of the House of Delegates. An earnest effort is made to try to keep the membership informed of actions taken by the Board and of the rationale behind such actions. This is often very difficult to do. Doctors are frequently not interested in a matter unless it directly affects them and this may be months after decisions have had to be made. In the interest of promoting better understanding and harmony within the Association, I would like to make a suggestion. Whenever some action of the Board of Governors seems unreasonable or imprudent, ask the Governor in your area for an explanation or write directly to the Association office. Then, before coming to a final conclusion, ask yourself: "Do I have all of the facts?" and "Is this the sort of action that a reasonable and intelligent person would have taken?" The answer to the first question should always be "Yes" before deciding that the answer to the second is "No." If reasonable people are given all of the facts and still cannot come to the same conclusion, at least they are more likely to understand each other's point of view and to resolve their differences harmoniously.

Robert E. Gellner

Association News

FLORIDA MEDICAL ASSOCIATION
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Know Your Board of Governors

Appearing here are short biographical sketches of the members of the Board of Governors of the Florida Medical Association for 1962. Individually, these men have accomplished much that is not listed for they, as do most men of achievement, excel in many fields. By knowing who governs the Association between the yearly meetings of the House of Delegates and by understanding that this directorship is founded on the dictates of a membership-elected House, all are assured that the Association is in good hands.

T.M.

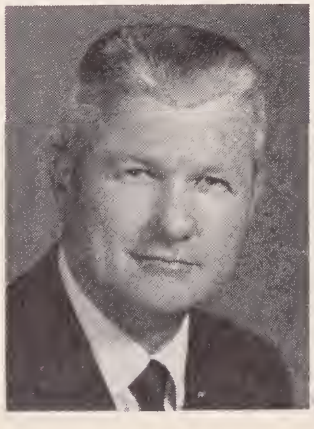
Robert Earl Zellner, M.D., of Orlando, as President of the Association presides over the Board of Governors and its executive committee this year. A Floridian, Dr. Zellner was born in Lakeland in 1915. He was awarded the B.S. degree in 1936 by the University of Florida and the M.D. degree in 1940 by Rush Medical College, The University of Chicago. After completing an internship at Grady Memorial Hospital in Atlanta, he served a residency at Orange Memorial Hospital in Orlando from 1942 to 1944. For 16 years he has engaged in the practice of general surgery in Orlando. From 1944 to 1956 he served in the Medical Corps of the U. S. Naval Reserve and was assigned to duty with the U. S. Marine Corps Amphibian Tractors for nine months at Dunedin and for two years at Camp Pendleton in California. In the Association Dr. Zellner held membership on the Committee on Insurance from 1951 to 1953 and was chairman of the Committee on Medical Economics from 1953 to 1957. He was a member of the Committee of Seventeen from 1956 to 1960 and chairman in 1959. In 1958, he was president of the Orange County Medical Society and has served that organization in various other capacities, including chairmanship of the insurance, public relations, program, medicolegal and several other committees and membership on its board of censors and executive council.



Warren Wilson Quillian, M.D., of Coral Gables, is an ex officio member of the Board of Governors and a member of its executive committee by virtue of his office of President-Elect of the Association. A Georgian, Dr. Quillian was born in Atlanta in 1901 and received his academic and professional training there. Emory University awarded him the B.S. degree in 1922 and the M.D. degree in 1924. He then served an internship and a residency at Grady Memorial Hospital in Atlanta and a residency at the U.S. Marine Hospital in Savannah. Since 1926 he has practiced pediatrics in Coral Gables. Dr. Quillian has served on the Board of Governors since 1960, was chairman in 1959 of the Committee on Councilor Districts and Council and has since 1939 been a member of the Committee on Child Health, serving as chairman for 12 of the 23 years. He was also the first chairman of the School Health Medical Advisory Committee and is a former Associate Editor of The Journal and member of the Committee on Publication. He is a past president of the Dade County Medical Association, a founder member and past president of the Florida Pediatric Society, and a past president of the American Academy of Pediatrics. Also, he has served as chairman of the pediatric section of the Southern Medical Association. Since 1955 he has been Clinical Professor of Pediatrics at the University of Miami School of Medicine and since 1960 a member of the university's board of trustees. During World War II, he served from 1942 to 1946 as a commander in the Medical Corps of the Navy assigned to duty in the Pacific Theatre of Operations. In 1952, the University of Florida conferred on him the honorary degree of Doctor of Science.



Edward Leslie Cole Jr., M.D., of St. Petersburg, Vice President of the Association, is an ex officio member of the Board of Governors. Dr. Cole was born in Hackensack, N. J., in 1920. He received his academic schooling at St. Petersburg Junior College and the University of Virginia, Charlottesville, Va., and in 1944 was awarded the M.D. degree by the University of Virginia School of Medicine. After completing an internship at the U. S. Naval Hospital, Newport, R. I., and residencies at the University of Virginia Hospital and at Rex Hospital, Raleigh, N. C., he entered the private practice of medicine in St. Petersburg in 1948.



His specialty is pediatrics. As a lieutenant he served in the Navy from 1944 to 1946 and from 1953 to 1955 with duty as a Marine Corps medical officer in North China. In the association Dr. Cole was elected Vice President this year and is chairman of the Subcommittee on Quackery. Since 1957 he has served the Pinellas County Medical Society as second vice president, first vice president, president-elect and president. Early this year, Dr. Cole was selected by the St. Petersburg Junior Chamber of Commerce as that city's outstanding citizen.

Eugene Goodbred Peek Jr., M.D., of Ocala, as Speaker of the House of Delegates is an ex officio member of the Board of Governors. A Floridian and the son of Dr. Eugene G. Peek Sr., President of the Association in 1943, Dr. Peek was born in Ocala in 1917. He attended Stetson University, the University of Florida, and the University of Richmond, Richmond, Va., receiving the B.S. degree in 1939 and the M.S. degree in 1940 from the Virginia institution. Four years later, he was awarded the M.D. degree by the Medical College of Virginia at Richmond. After completing an internship there and a residency at St. Elizabeth's Hospital in Richmond, he began the general practice of medicine in Ocala. Shortly thereafter, he entered the Medical Corps of the Army and upon discharge with the rank of captain in 1948, he resumed practice in Ocala. In the Association Dr. Peek has served as a district and state councilor, as a member of the Public Relations Committee and the Committee on State Legislation and its Subcommittee on Liaison with State Agencies, and as an alternate delegate to the A.M.A. House of Delegates. In 1960 he was elected Vice Speaker of the Association's House of Delegates and acceded to the speakership in 1962. Currently, he is chairman of the Medical Advisory Committee to the State Department of Public Welfare and since July 1961 has been president of the Florida State Board of Health. He is a former secretary-treasurer, vice president and president of the Marion County Medical Society and is a director of the Florida Academy of General Practice.



Samuel Mason Day Jr., M.D., of Jacksonville, has since 1951 been Secretary-Treasurer of the Association and is therefore an ex officio member of the Board of Governors and a member of its executive committee. Dr. Day was born in Nixburg, Ala., in 1914. Upon graduation from the University of Alabama in 1934, he received his professional training at Washington University School of Medicine, St. Louis, where he won his medical degree in 1937. After serving internships at Union Memorial Hospital and University Hospital, Baltimore, he completed residencies at Doctors Hospital and James Walker Hospital, New York City, later pursuing further postgraduate work at Doctors Hospital. Dr. Day is a former secretary and president of the Duval County Medical Society. In 1961, he was president of the Jacksonville Hospitals Educational Program and he is a former vice president of the Duval County Unit of the American Cancer Society. During World War II, he served from 1942 to 1946 in the Army Medical Corps, retiring from military duty with the rank of major.



Samuel Carnes Harvard, M.D., of Brooksville, immediate Past President of the Association, is now in the first year of a two year term on the Board of Governors and on its executive committee by reason of that status. The son of a physician, Dr. Harvard was born in Arabi, Ga., in 1902 and was educated in his native state. He received the A.B. degree in 1922 and the M.D. degree in 1930 from Emory University and then served an internship at Grady Memorial Hospital in Atlanta and a residency at that institution's Steiner Cancer Clinic. Since 1933 he has engaged in the general practice of medicine in Brooksville. He has served the Association in several posts of high responsibility. In 1957 he was chairman of the Council and the following year became First Vice President and chairman of the Committee on Medical Economics. Since 1959 he has been a member of the Board of Governors and in 1960 became President-Elect, acceding to the presidency in 1961. Also at the state level, he has been a member of the State Board of Medical Examiners since 1958 and was its president in 1961. In 1959 he was appointed by Governor Collins to membership on the Florida Citizens Medical Committee on Health. His was a leading role in the building of the present modern Hernando County Hospital and for several terms he held the office of vice president and of president in the Pasco-Hernando-Citrus County Medical Society. At various times he has served on special committees of the Florida Obstetric and Gynecologic Society and was its president in 1957.



Leo Michael Wachtel, M.D., of Jacksonville, has been a member of the Board of Governors since he was chosen President-Elect of the Association in 1959 and is now completing his two year term on the Board as a past president. He serves as public relations officer. A native of Savannah, Ga., where he was born in 1912, Dr. Wachtel received his academic degree from Emory University, Atlanta, in 1934 and his medical degree from Jefferson Medical College, Philadelphia, in 1938. He then served a two year internship at St. Vincent's Hospital in Jacksonville. After four years in the Army Medical Reserve Corps, he



entered the general practice of medicine in Jacksonville. A member of the Council from 1956 to 1958, he held membership on the Key Contact Committee of the Association in 1958 and 1959 and during those years was chairman of the Committee on Necrology. He served on reference committees in 1957, 1958 and 1959, the first year as chairman, and in 1960 became President of the Association. A past president of the Duval County Medical Society, Dr. Wachtel has also served as president of the Florida Academy of General Practice and has just completed a three year term as a member of the Commission on Hospitals of the American Academy of General Practice. For several years he served on the board of directors and on the executive committee of Blue Shield of Florida and in 1959 was chairman of the Jefferson Medical College Alumni of Florida.

Charles Larsen Jr., M.D., of Lakeland, is this year's member at large on the Board of Governors by appointment of the President of the Association. Dr. Larsen



was born in Jacksonville in 1914 and obtained his academic training in his native state. After completing the premedical course at the University of Florida with graduation in 1935, he attended Duke University School of Medicine where he was awarded the M.D. degree in 1939. He served an internship at St. Luke's Hospital, Cleveland, Ohio, and from 1940 to 1944 held residencies at St. Luke's Hospital and University Hospitals, Western Reserve, in that city. He then entered military service as a lieutenant in the Medical Corps of the Navy and participated with the 5th Marines in the invasion of Iwo Jima. Since discharge from military duty in 1946, he has engaged in the private practice of medicine in Lakeland, specializing in general surgery. Dr. Larsen has served the Association since 1960 as chairman of the Committee on Industrial Medicine. He is a former secretary-treasurer of the Polk County Medical Association and served as its president in 1961. For three years he has been secretary-treasurer of the Florida chapter of the American College of Surgeons and last year was chairman of the local committee on trauma of that organization. Presently, he is president-elect of the Florida Association of General Surgeons and he is a former vice president of the Florida Association of Industrial and Railway Surgeons. He now serves as district chairman of the Florida Medical Committee for Better Government.

Henry Jennings Babers Jr., M.D., of Gainesville, represents District A on the Board of Governors for a term expiring in 1966. Born in Gainesville in 1912, Dr. Babers received his academic training there and was awarded the B.S. degree by the University of Florida in 1932. He won his medical degree at Cornell University Medical College, New York City, in 1936. After completing an internship and a two year residency in surgery at New York Hospital in New York City, he served a two year residency in surgery at Cumberland Hospital, Brooklyn, N. Y. During World War II he served from 1941 through 1945 as a lieutenant colonel in the Army Medical Corps and upon discharge from military service



completed a residency in surgery at Riverside Hospital in Jacksonville before entering the practice of general surgery in Gainesville in 1946. Later he engaged in graduate study at the University of Pennsylvania. In the Association Dr. Babers was a Councilor in 1954 and a member of the Advisory Committee to Blue Shield from 1957 to 1959. Since 1961 he has served on the Committee on Fee Schedules. He is a past president of the Alachua County Medical Society and former chairman of its public relations committee and Blue Shield liaison committee. Since 1959 he has been a member of the board of directors of Blue Shield of Florida and since 1960 a member of the board of directors of Blue Cross of Florida. In 1961 he was president of the Florida Association of Industrial and Railway Surgeons. He has served on the faculty of the College of Medicine of the University of Florida as Clinical Assistant in Surgery since 1959.

Hiram Phillip Hampton, M.D., of Tampa, completes in 1963 his present term on the Board of Governors as the representative from District B and is by appoint-



ment a member of its executive committee. Born in Tampa in 1913, Dr. Hampton obtained his academic and medical education at Emory University, Atlanta, receiving the B.S. degree in 1934 and the M.D. degree in 1937. He then served an internship at Cincinnati General Hospital, Cincinnati, Ohio, and from 1938 to 1941 a residency in internal medicine at the Mayo Foundation, Rochester, Minn. In 1941 he was awarded the degree of M.S. in Medicine by the University of Minnesota. After four years' service as a lieutenant colonel in the Army Medical Corps with duty in the European Theatre of Operations, he entered the practice of internal medicine in Tampa in 1946. In the Association Dr. Hampton was chairman of the Committee on Legislation and Public Policy from 1953 to 1959 and since that time has been chairman of the Council on Legislation and Public Agencies, heading the Committee on National Legislation. He has served the American Medical Association as a member of its Committee on Indigent Care since 1958 and is a member of its Speakers Bureau. He has also been active on the Florida State Board of Health Service for the Indigent Program. In 1955 he became chairman of the Committee on Indigent Hospitalization and in 1958 vice chairman of the Citizens Medical Committee on Health by appointment of Governor Collins. Currently he is a member of the Medical Advisory Board of the Sears Roebuck Foundation.

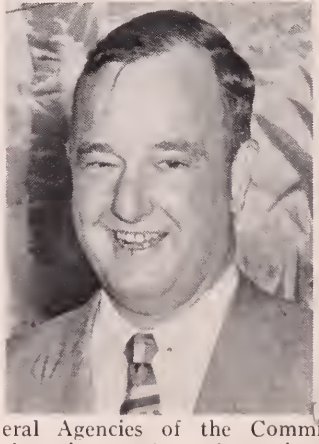
Charles Joseph Collins, M.D., of Orlando, represents District C on the Board of Governors, his term expiring in 1965. A native of Georgia, Dr. Collins was born in Cartersville in 1900. After completing premedical schooling at the University of Georgia, he received his professional training at Emory University, Atlanta, where he was graduated in 1921. He served an internship at Grady Memorial Hospital in Atlanta and residencies at St. Joseph's Hospital and the U. S. Marine Hospital in Savannah. Since 1925 he has engaged in the private practice of medicine in Orlando, specializing in gynecology. He is a veteran of World War I. Dr. Collins is a former Second Vice President of the Association and a former chairman of the Committee on Fee Schedules and the Committee on Scientific Work. For many years he was a member of The Journal's Committee on Publication. He has served the Orange County Medical Society as president and as chairman of numerous committees. He was president of the Florida State Board of Health from 1954 to 1959 and is also a past president of the South Atlantic Association of Obstetricians and Gynecologists and the Southern Gynecological and Obstetrical Society, a former chairman of the section on gynecology of the Southern Medical Association and a director of the American Society for the Study of Sterility. He holds membership on the Medical Advisory Committee of the University of Florida College of Medicine and lectures there on gynecology.



Ralph S. Sappenfield, M.D., of Miami, represents District D on the Board of Governors, his term of office expiring in 1964. Born in Indiana in 1907, Dr. Sappenfield received his academic and professional training in his native state. He was awarded the B.S. degree in 1928 and the M.D. degree in 1930 by Indiana University at Bloomington and Indianapolis. After serving an internship and a residency at Indiana University Hospital in Indianapolis, he practiced medicine for six years in Brookville, Ind. From 1938 to 1940 he engaged in graduate study in anesthesia at New York University College of Medicine and Bellevue Hospital, New York City. Since 1940 he has practiced his specialty in Miami except for four years' military service as a major in the Medical Corps of the Air Force during World War II. Dr. Sappenfield was a member of the Board of Governors in 1959 and Vice President of the Association in 1961. He is a former chairman of the Finance Committee and the Committee on Tuberculosis and Public Health and a former member of the Blue Shield Liaison Committee and the Advisory Committee to Blue Shield. Since 1959 he has been a member of the Committee on Internships and Residencies and since 1960 has held membership on the Committee on Fee Schedules. This year he is also serving as a member of the Sub-Committee on Inter-American Relations. He is a former treasurer, president and member of the board of trustees of the Dade County Medical Association and was the board's liaison officer with the University of Miami School of Medicine. Before coming to Florida, he served as secretary and president of the Fayette-Franklin County Medical Society in Indiana. Offices he has held in organizations of his specialty include chairman of the section on anesthesiology of the American Medical Association; secretary, vice chairman and chairman of the section on anesthesiology of the Southern Medical Association; president of the Southern Society of Anesthesiologists; honorary president of the International Anesthesia Research Society; vice speaker and president of the American Society of Anesthesiologists; and chairman of the executive committee of the World Federation of Societies of Anesthesiologists. In 1951 he was president of the Florida Society of Anesthesiologists.



Burns Alan Dobbins Jr., M.D., of Fort Lauderdale, is the A.M.A. delegate on the Board of Governors, his term expiring in 1963. Born in Birmingham, Ala., in 1915, Dr. Dobbins received the B.S. degree from the University of Florida in 1935 and the M.D. degree from Temple University School of Medicine, Philadelphia, in 1939. A two year internship at Philadelphia General Hospital was followed by a brief period of practice in Sweetwater, Tenn., and in 1942 by a residency at Columbia-Presbyterian Hospital, New York City. He then entered the Medical Corps of the Navy, serving until 1946 with the rank of lieutenant commander. Since that time he has practiced medicine in Fort Lauderdale, specializing in pediatrics. In addition to representing the Association in the A.M.A. House of Delegates for the fourth year, Dr. Dobbins is serving as chairman of the Medicare Committee. He has also served on the Subcommittee on Liaison with Federal Agencies of the Committee on National Legislation since 1960 and previously was a member of the Committee on Legislation and Public Policy. He is a past president of the Broward County Medical Association and former member of its board of trustees and board of censors. He is also a past president of the Florida Pediatric Society.





Editorials

The Hippocratic Oath

Our colleagues in Saskatchewan have been accused of violating the Hippocratic Oath by their refusals to treat any but emergency cases. The arguments have generated more heat than light, with logic often smothered by emotion; it is desirable to clarify one point: the Hippocratic Oath has *not* been violated by the "strike."

Although the Hippocratic Oath has become a household expression, most households do not contain a copy, and few persons, even physicians, can recall its provisions accurately. The Journal therefore takes the liberty of reprinting the Jones translation:

The Hippocratic Oath

I swear by Apollo Physician, by Asclepius, by Health, by Panacea and by all the gods and goddesses, making them my witness, that I will carry out according to my ability and judgment, this oath and this indenture. To hold my teacher in this art equal to my own parents; to make him partner in my livelihood; when he is in need of money to share mine with him; to consider his family as my own brothers, and to teach them this art, if they want to learn it, without fee or indenture; to impart precept, oral instruction, and all other instruction to my own sons, the sons of my teacher, and to indentured pupils who have taken the physician's oath, but to nobody else. I will use treatment to help the sick according to my ability and judgment, but never with a view to injury and wrong-doing. Neither will I administer a poison to anybody when asked to do so, nor will I suggest such a course. Similarly I will not give to a woman a pessary to cause abortion. But I will keep pure and holy both my life and my art. I will not use the knife, not even, verily on sufferers from stone, but I will give place to such as are craftsmen therein. Into whatsoever houses I enter, I will enter to help the sick, and I will abstain from all intentional wrong-doing and harm, especially from abusing the bodies of man or woman, bond or free. And whatsoever I shall see or hear in the course of my profession, as well as outside my profession in my intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets. Now, if I carry out this oath and break it not, may I gain forever reputation among all men for my life and for my art; but if I transgress it and forswear myself, may the opposite befall me.

Nowhere does the Oath mention the relief of suffering, nor who should be treated, nor how much he be charged. The honorable tradition of our profession that no sick person shall be denied the best of medical care regardless of his ability to pay is of much more recent origin than the Oath of Hippocrates.

The Oath bound the practitioner of ancient times to enter his patient's house with the sole purpose of doing him good, to conduct himself in such a manner as to avoid any appearance of evil, and to keep secret his professional observations. It also bound him to regard his teacher as his parent, his teacher's children as his own and to succor them in time of need. These provisions of the Oath continue to be observed.

It may come as a shock that most of us violate almost daily some of the Oath's provisions: surgery has long since been accepted as part of the profession, while the imparting of medical knowledge to nurses, technicians and the public at large is now considered an obligation rather than a violation of professional ethics.

The Oath of Hippocrates is a remarkable moral code which has guided physicians for 24 centuries; it is a tribute both to the Oath and to the medical profession that the situation in Saskatchewan should have caused concern over the apparent breakdown in medical ethics. Let us reiterate that failure to treat patients is *not* a violation of the Hippocratic Oath.

Let us also hope that the current discussion will not culminate in a decision of the Supreme Court making it unlawful for physicians to swear by the pagan gods Apollo, Aesculapius, Hygeia and Panacea!

J.M.P.

Figures Do Not Tell the Whole Story

Recent studies of accident fatality figures and comparison with similar figures before 1958 indicate that positive closing door latches are saving about 800 lives per year whereas safety belts are saving about 64 lives per year.

While this does not seem to be a strong argument in favor of seat belts, what these figures do not show is the number of people who use seat belts and who escape serious head, facial, and

pelvic injuries by being restrained rather than thrown forward against the dash or the back of the front seat. It remains the duty of the medical profession to continue to show the need for some sort of restraining harness to be worn regularly by all occupants of automobiles.

A recent improvement to the lap belt has been the addition of a cross chest strap for use in sedan type automobiles. This is manufactured by the Rose Manufacturing Company of Denver and is a very comfortable piece of apparatus for the passenger in the front seat. It prevents the front seat occupant from whipping forward on the lap belt alone and striking the steering post in the case of the driver or the dashboard in the case of the passenger. It is also designed in such a way as to keep the upper portion of the torso of the occupant within the automobile even should the doors become opened in the event of a serious roll-over. Experiences show it to be much superior to the simple lap belt in the degree of protection offered. It is mandatory in Sweden.

Charles A. Mead Jr., M.D.
Jacksonville

Clinical Research Center
University of Florida College of Medicine

The establishment of Clinical Research Centers in a limited number of medical schools in this country is recognition of a national need for facilities to study human disease. The rapid rate of growth of funds available for research in medicine is a spectacular phenomenon of the past 10 years. The research grant funds in recent years have gone chiefly to support laboratory and animal experimentation. It has been difficult to obtain funds from either private or government sources for the support of hospital beds for research. As a result the gap between scientific knowledge and its application to patient care has widened. The meeting of the need for support of beds will round out the research program in medical schools and permit application of the facts discovered in animal studies to the solution of human disease problems.

The grant to the University of Florida, announced in the news section of The Journal, is recognition of the caliber of the faculty and the quality of research under way in our state medical school. The grant will permit hospitalization for study of selected patients having specific disease processes under study by senior faculty members of the College of Medicine. The unit will not be used for the admission of rare and unusual instances of disease that are only occasionally encountered by the practicing physician. The pattern for the new unit will be the Clinical Center of the National Institutes of Health at Bethesda, Md., which has contributed so much in fundamental studies on illness which can only be studied in the human being. The grant will furnish research metabolic dietitians, highly qualified technologists and specially trained nurses as well as a completely equipped metabolic kitchen and specialized laboratory equipment. The availability of the facilities and supporting staff will permit the initiation of many types of clinical studies, such as those requiring metabolic balance, which it is not now possible to make on the general wards of the Teaching Hospital.

The role of the Clinical Research Center is to test new information in patients so that the results can be applied to the practice of medicine in the communities in the state in the shortest possible time. The protocols for the initial studies are now being worked out by the professional staff of the College of Medicine and their investigative teams. These include studies on myocardial metabolism, renal failure, calcium metabolism, fat metabolism in diabetes, oxygen therapy in respiratory failure, and alteration in sleep with various diseases. Patients will be admitted in October as soon as minor remodeling is completed and additional kitchen and core laboratory facilities are installed. The program director selected to be in day-to-day charge of the Center has been a practicing internist in a small city in Florida. This selection assures the practitioners of the state that the needs for new knowledge in patient problems peculiar to Florida will be considered in the selection of disease processes to be studied.

George T. Harrell, M.D., Dean
University of Florida
College of Medicine
Gainesville

Two Recent Surveys Point the Way to Progress for Blue Shield

Many people said it could not be done. They predicted that Florida's physicians would never take the time from their busy schedules to complete a detailed "attitude survey" designed to elicit their views concerning Blue Shield of Florida. Close to 60 per cent of Blue Shield's participating physicians did respond and thoughtfully completed a four page questionnaire submitted to them in November 1961. A similar survey of Blue Shield subscribers, conducted in the spring of 1962, also brought forth a number of favorable comments from more than 3,000 "K" Blue Shield contract holders.

Taking the results of the physician survey first, the Board of Directors of Blue Shield of Florida was pleased to obtain factual evidence to support several opinions held by the Board.

What Florida Physicians Think of Blue Shield.—About 2,500 of Florida Blue Shield's 4,400 "plus" participating physicians completed the survey. Of those responding, 69 per cent chose to sign their names to the completed questionnaire.

Sixty-nine per cent of the respondents stated it was their belief that the Board of Directors and operating management of the Plan are doing an effective job of managing the affairs of the corporation. Sixty-three per cent expressed the belief that Blue Shield member-patients of theirs were generally satisfied with their coverage, but apparently were not too well informed concerning the "fine print" in their contracts, nor did they have a clear corporate image of Blue Shield of Florida.

One disturbing response revealed that 61 per cent of the responding physicians—participating doctors of Blue Shield—do not think they have any special advantage as a "participating" physician over a "nonparticipating" physician.

As President of Blue Shield of Florida may I briefly state two advantages which are held by participating physicians? First, participating physicians are paid directly by the Plan for services rendered. Nonparticipating physicians must collect their fees from subscribers who are reimbursed by the Plan on an indemnity basis. Second, participating physicians can provide "full service coverage" of the medical-surgical needs of low income patients who are hospitalized. This is a service that participating physicians can give so that hospitalized low income subscribers can be reassured they will receive the best possible medical care without fear of a burdensome medical debt hanging over their shoulders.

The threat of compulsory health insurance imposed upon all by the federal government hangs over all of us at the present time. It was gratifying to the Board of Directors that 76 per cent of the responding physicians thought that Blue Shield of Florida is helping to meet the threat of compulsory health insurance.

In response to an open-ended question Florida's physicians gave a number of helpful suggestions which, if implemented by the Board of Directors, might improve the offerings of Florida Blue Shield which are available to 890,000 Blue Shield members. Based on an analysis of a sample of 1,000 returns from Florida physicians, it would appear that 65 per cent of those responding to the survey made one or more suggestions concerning what they believed to be the next forward-looking step of the Florida Plan. First and foremost, the responding physicians recommended coverage by Blue Shield of outpatient diagnostic and related laboratory services. Next, in order of frequency, they urged increased medical care coverage payments. As one means of keeping down the premium cost to subscribers, they urged the inclusion of a deductible clause, if possible, in Blue Shield contracts. They urged the Plan to provide adequate coverage of the needs of senior citizens and to give a thorough review to service benefit levels available in Florida Blue Shield contracts. Lastly, they urged the Plan to give greater stress to Master Medical coverage of long term illnesses of the subscribers.

The Board was pleased to receive the results of this physicians survey and then asked the staff to conduct a similar survey of subscriber attitudes toward the Plan.

What Florida Subscribers Think of Blue Shield and Blue Cross.—At the direction of the Board of Directors, the staff of the Plan initiated a study of attitudes of subscribers under the "K" Blue Shield contract. More than 3,200 replies

were received from holders of the "K" contract, and the response was sufficient to give the Board a reliable survey of the attitudes of a representative sampling of Blue Shield contract holders.

Seventy-six per cent of the responding subscribers rated Blue Shield of Florida as "excellent" or "satisfactory" as an agency which would provide them with help toward paying for their medical and surgical needs. Surprisingly, 93 per cent said that they had read their contracts and other literature sent them by the Plan. This response apparently is a contradiction to the statements made in the physicians' survey that subscribers appear to be satisfied with their coverage, but are not well informed about the fine print in their contracts. Eighty per cent stated that they understood the medical and surgical benefits listed in their contracts. Thirty-one per cent stated that either they or some member of their family required hospitalization during the calendar year 1961.

The subscribers expressed somewhat different views than those held by the physicians as to what should be the next steps taken by Blue Shield of Florida to improve the Plan. In the order of frequency mentioned by subscribers, the respondents urged the Plan to provide coverage of diagnostic services, dental care coverage, and coverage of home and office visits to the physician. Direct pay subscribers urged the Plan to consider a monthly premium rate.

The responding subscribers urged Blue Cross of Florida to consider increasing the room allowances for hospitalized members and to give consideration to increasing the coverage of nursing services.

It appears that group subscribers were generally satisfied with their coverage, usually leaving the choice of benefits up to the management since management pays a considerable part of the premiums for health care coverage for employees of an organization.

Direct pay subscribers expressed a keen interest in additional services, but they showed little inclination to pay extra premiums which would be required if such services were added to their contracts.

Future Action by Blue Shield of Florida. —The Board of Directors of Blue Shield of Florida has studied carefully the results of these two surveys and has initiated steps which will lead, it is hoped, to improving the operations of the Plan and provide more varied coverage designed to meet the needs both of the subscribers and of the physicians.

As President of Blue Shield of Florida, the physicians' own service organization, I urge every member of the Florida Medical Association to give me any suggestions which could be used by the Board to supplement the results of these surveys and assist Blue Shield of Florida to remain a vital agency in the private health care field. Your wishes will receive thoughtful consideration by the Board of Directors which represents you, the physicians of Florida.

Russell B. Carson, M.D., President
Blue Shield of Florida, Inc.
Fort Lauderdale

News

A research grant of $2,076,306 has been received by the University of Florida at Gainesville from the United States Public Health Service for the establishment and support of a clinical research center at the J. Hillis Miller Health Center. It provides for patient care and nursing and technical staffs for a ten bed research clinic to which a patient may be admitted by his own physician who must show that the course of treatment he plans will increase medical knowledge of the particular disease and also that the treatment is consistent with good patient care. Dr. William C. Thomas Jr. has been appointed medical director of the unit.

The Southeastern States Cancer Seminar will be held in the George Washington Hotel at West Palm Beach on November 15, 16 and 17. Physicians from Florida appearing on the program include Dr. James F. Cooney of West Palm Beach; Dr. James E. Fulghum of Jacksonville; Dr. Edward R. Woodward of Gainesville, and Drs. James H. Ferguson, Daniel S. Martin and Joseph J. Zavertnik of Miami.

The 13th Annual Scientific Assembly of the Florida Academy of General Practice being held October 19-21 in the Deauville Hotel at Miami Beach features sessions on arthritis, genitourinary disease, endocrine disturbances and pediatric problems. Featured guest speakers include Dr. John H. Talbott of Chicago, Dr. Jay Philip Sanford of Dallas, Dr. John D. Young of Baltimore, Dr. Robert Glynn of Newark, N. J., Dr. Robert B. Greenblatt of Augusta, Ga., Dr. Harry C. Shirkey of Birmingham, Ala., and Dr. Victor Witten of New York City.

The Fourth Annual Fall Meeting of the Florida State Surgical Division of the International College of Surgeons is being held Friday and Saturday, November 16-17, at the University of Florida College of Medicine in Gainesville.

A Postgraduate Seminar in Gynecology and Obstetrics is being offered by the Department of Gynecology of Emory University School of Medicine in Atlanta, December 6-8. Included on the faculty will be Drs. Nicholson J. Eastman and Richard W. TeLinde of Baltimore.

A postgraduate short course on the "Management of Mass Casualties" is being presented at Walter Reed Army Institute of Research, Washington, D. C., October 30-November 1. A similar course has been scheduled for March 25-29, 1963, at Brooke Army Medical Center, Fort Sam Houston, Texas. Physicians desiring to attend one of the courses should write to the AMA Department of National Security, 535 North Dearborn St., Chicago 10.

Appraisal of practical clinical laboratory methods and newer diagnostic techniques will be the emphasis of the postgraduate course, "Clinical Pathology in Medical Practice," being offered by the Medical College of Georgia at Augusta October 23-25. Application may be made with Dr. Claude-Starr Wright, Director, Department of Continuing Education.

The conference program of the Florida Society for the Prevention of Blindness will be held October 11-13 at the Causeway Inn on the Courtney Campbell Causeway in Tampa. The scientific program is being confined to Saturday, October 13, beginning at 9:00 a.m. and ending in the afternoon.

The Southern Chapter of the American College of Chest Physicians will hold its annual meeting on November 11-12 at the Hotel Fontainebleau, Miami Beach, in conjunction with the annual meeting of the Southern Medical Association on November 12-15. Dr Dewitt C. Daughtry of Miami is chairman of the Committee on Local Arrangements.

A "Physicians' Seminar on Non-Tuberculous Respiratory Diseases" has been scheduled for November 8-9 at the Duval Medical Center Auditorium in Jacksonville. The opening session will begin at 9:00 a.m. on Thursday and the program ends early on Friday afternoon.

A postgraduate symposium in "Geriatrics—The Physician and the Older Patient" is being held in the auditorium of the Mound Park Hospital in St. Petersburg on October 18-20. A total of 18 credit hours in Category I will be allowed by the American Academy of General Practice.

Meetings

October

Florida Urological Society, October 6-7, Jack Tar Grand Bahama Hotel, Grand Bahamas
Florida Society of Anesthesiologists, October 6-7, Langford Hotel, Winter Park
Florida Society for the Prevention of Blindness, Conference Program, October 13, Causeway Inn, Tampa
Tenth Annual Seminar, Florida Diabetes Association, October 18-19, Balmoral Hotel, Miami Beach
Symposium in Geriatrics—"The Physician and the Older Patient," October 18-20, Mound Park Hospital Auditorium, St. Petersburg
Florida Academy of General Practice, Thirteenth Annual Scientific Assembly, October 19-21, Deauville Hotel, Miami Beach
Florida Orthopedic Society, Fall Meeting, October 20-21, Boca Raton Club, Boca Raton
Florida Psychiatric Society, October 20-21, Nassau Beach Hotel, Nassau, B.W.I.
Third Annual Medical Seminar Cruise, University of Florida College of Medicine, October 29-November 5, MS Bergenjford

November

Seminar on Nontuberculous Respiratory Diseases, November 8-9, Duval Medical Center, Jacksonville
Southern Medical Association 56th Annual Meeting, November 12-15, Hotel Fontainebleau, Miami Beach
Florida Obstetric and Gynecologic Society, November 30, December 1-2, Crystal River
Florida Pediatric Society, November 15-18, Causeway Inn, Tampa
Southeastern States Cancer Seminar, November 15-17, Hotel George Washington, West Palm Beach
Fall Meeting, Florida State Surgical Division of International College of Surgeons, November 16-17, Gainesville

December

Florida Society of Ophthalmology and Otolaryngology, December 7-9, Paradise Point Hotel, Crystal River

Books Received

The following books have been received. Those which appear to be of particular interest will be reviewed as space permits.

Treatment of Injuries to Athletes. By Don H. O'Donoghue, M.D. Pp. 649. Illus. Price $18.50. Philadelphia. W. B. Saunders Company, 1962.

Pediatrics. By L. Emmett Holt, Jr., Rustin McIntosh and Henry L. Barnett. Ed. 13. Pp. 1395. Illus. Price $18.00. New York, Appleton-Century-Crofts, Inc., 1962.

Psychological Development in Health and Disease. By George L. Engel, M.D. Pp. 435. Price $7.50. Philadelphia, W. B. Saunders Company, 1962.

Pediatric Diagnosis: Interpretation of Signs and Symptoms in Different Age Periods. By Morris Green, M.D., and Julius B. Richmond, M.D. Ed. 2. Pp. 541. Price $13.00. Philadelphia, W. B. Saunders Company, 1962.

Practical Anesthesiology. By Joseph F. Artusio, Jr., M.D. Pp. 318. Illus. Price $7.75. Saint Louis, The C. V. Mosby Company, 1962.

Enzymes and Drug Action. Ciba Foundation Symposium Jointly with Co-ordinating Committee for Symposia on Drug Action. Editor for the Co-ordinating Committee, J. L. Mongar, Ph.D. Editor for the Ciba Foundation, A. V. S. de Reuck, M.Sc., D.I.C. Pp. 556. Illus. 90. Price $12.50. Boston, Little, Brown and Company, 1962.

Illustrated Manual of Neurologic Diagnosis. By R. Douglas Collins, M.D., Captain, USAF, MC. Pp. 177. Illus. 97. Price $12.00. Philadelphia, J. B. Lippincott Company, 1962.

Diagnosis and Management of Pain Syndromes. By Bernard E. Finneson, M.D., F.A.C.S. Pp. 261. Illus. Price $8.50. Philadelphia, W. B. Saunders Company, 1962.

Primer of Clinical Measurement of Blood Pressure. By George E. Burch, M.D., and Nicholas P. DePasquale, M.D. Pp. 141. Illus. Price $5.50. St. Louis, The C. V. Mosby Company, 1962.

Fundamental Skills in Surgery. By Thomas F. Nealon, Jr., M.D. Pp. 289. Illus. Price $8.50. Philadelphia, W. B. Saunders Company, 1962.

Textbook of Pathology With Clinical Application. By Stanley L. Robbins, M.D. Ed. 2. Pp. 1190. Illus. Price $19.00. Philadelphia, W. B. Saunders Company, 1962.

Synopsis of Obstetrics. By Charles E. McLennan, M.D. Ed. 6. Pp. 464. Illus. 157. Price $6.75. St. Louis, The C. V. Mosby Company, 1962.

Clinical Biochemistry. By Abraham Cantarow, M.D., and Max Trumper, Ph.D. Ed. 6. Pp. 776. Illus. Price $13.00. Philadelphia, W. B. Saunders Company, 1962.

Gynecology and Obstetrics. By John William Huffman, M.D. Pp. 1190. Illus. Price $28.00. Philadelphia, W. B. Saunders Company, 1962.

Gynecology. By Langdon Parsons, M.D., and Sheldon C. Sommers, M.D. Pp. 1250. Illus. Price $20.00. Philadelphia, W. B. Saunders Company, 1962.

Differentiation Between Normal and Abnormal in Electrocardiography. By Ernst Simonson, M.D. Pp. 328. Illustrated. Price $13.50. St. Louis, The C. V. Mosby Company, 1961.

This book is a well organized approach to a more precise understanding and interpretation of the standard 12 lead electrocardiograph. The excellent sampling methods, the clear tabulation, and the author's thoughtful explanations give the reader many useful pieces of information as he attempts more accurately to delineate the normal from the abnormal tracing.

The 14 chapters really make up three books in one. The initial six chapters deal with sampling methods, standardization of recording techniques, a lucid and technically detailed description of the instruments used in making electrocardiograms, and the development of the statistical concept of "the best discriminating value." Much of the material presented in this section has value in the study of methodology and statistics beyond the field of electrocardiography. The author spends much time developing each of the many physiologic and biologic variables which affect the electrocardiogram. From this review it appears that the single most important variable in the adult population is that of age. One example is the "septal Q" of the left chest leads which by his tables is present in 98 per cent of young adults, but in the normal older group is absent in 50 per cent of the cases.

The middle chapters contain tabulated data from a sample of 940 healthy adults. The well planned method of sampling, the detailed tables and the accompanying discussion make up a very usable reference text. Many of the values are in agreement with older texts; however, a few show significant refinement. For example, the normal R/S ratio in V-1 was recorded to have an upper limit of 0.7-0.8, a value significantly smaller than the ratio of 1.0 tabulated by Sokolow and Friedlander.

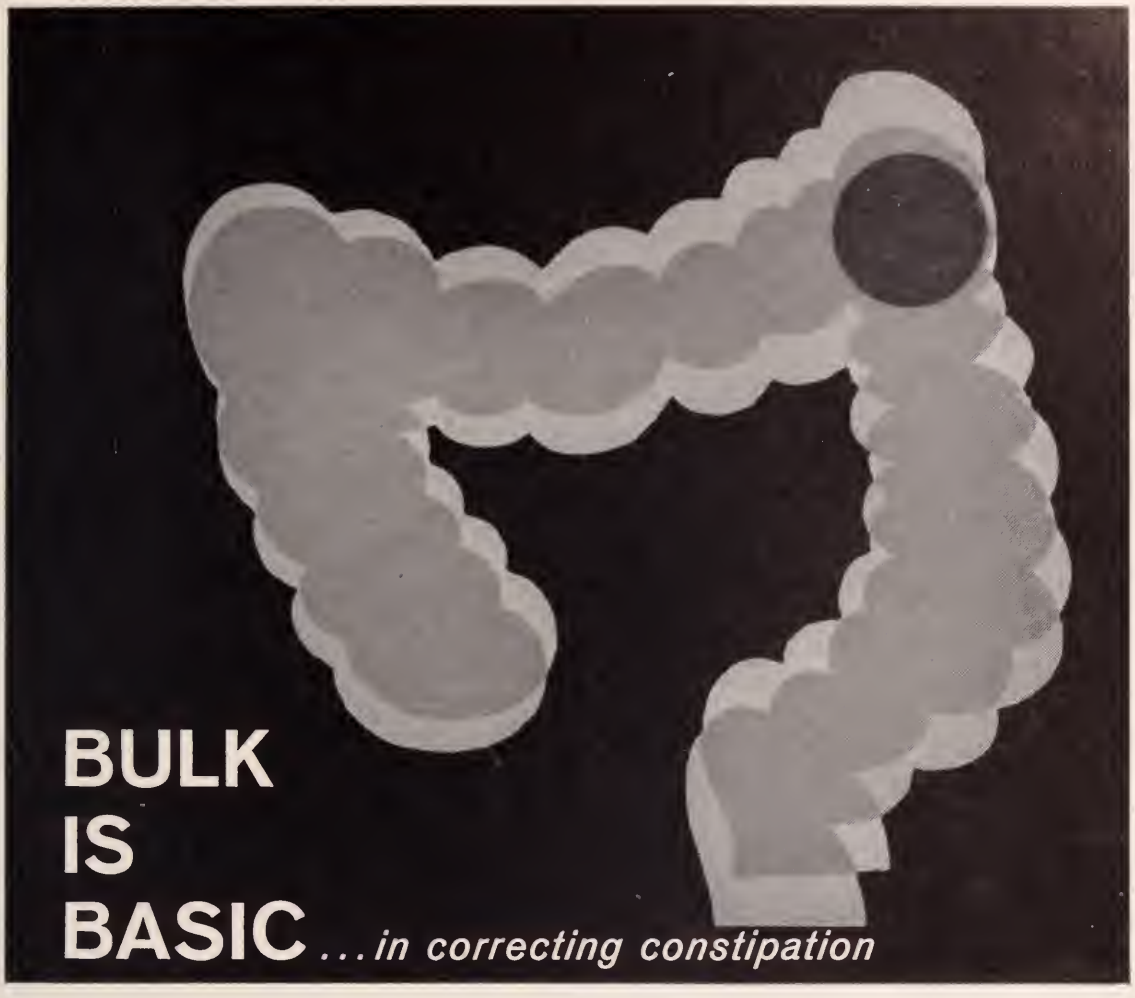
The remaining chapters concern themselves with various stress tests, with the significance of minor changes in the resting cardiograph, and finally with what this reviewer considers an extremely objective and judicial discussion of recent advances in the field of vectorcardiography. Here the effort is directed toward the establishment of a unified pattern of electrode placement, and promotion of the concept that analysis of the vectorcardiogram, when large enough samples have been made, will be less complex than has been the case with the classic electrocardiogram.

In summary, the author gives an excellent detailed discussion of his methodology. He proceeds by presenting his data in a usable manner. This presentation is followed by a complete discussion of all the known electrocardiogram stress tests. A brief history of vectorcardiography is included with a plea for standardization of techniques. This reviewer found the book very stimulating, and other readers will be prodded to think more deeply into the significance of previously accepted normal values. The methodology used is so cautious and the tabulations so acceptable that by their use the reader should be able to minimize further that group of electrocardiograms formerly read as "borderline." The book will surely prove to be an important addition to the electrocardiographer's reference shelf.

Jim C. Hirschman, M.D.

Hypertension. Recent Advances. The Second Hahnemann Symposium on Hypertensive Disease. Edited by Albert N. Brest, M.D., and John H. Moyer, M.D. Pp. 660. Illustrated. Price $12.00. Philadelphia, Lea & Febiger, 1961.

This book is a collection of papers, given at the second Hahnemann symposium on hypertensive disease, which thoroughly covers all aspects of hypertension. For example, Part I presents the natural history of hypertension; Part II, the etiological mechanisms of hypertension; Part III, arteriosclerosis and hypertension; Part IV, the pharmacology of hypertension, diuretics, Rauwolfia and



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1. Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice, ed. 6, Baltimore, The Williams & Wilkins Company, 1955, p. 578.

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In my opinion every doctor interested in the treatment of hypertension will want a copy of this book in his library for reference purposes as the bibliography is quite complete. It is regrettable that the book was made possible only through a generous gift of a pharmaceutical house, and one wonders if one can always be objective about drugs when so many of the papers in the book have been supported by pharmaceutical grants. In addition, several chapters are by full time physicians with pharmaceutical corporations. These considerations, however, distract only slightly from the over-all value of it as a reference book.

Charles K. Donegan, M.D.

Mechanisms of Disease, An Introductory to Pathology. By Ruy Perez-Tamayo, M.D. Pp. 512. Illustrated. Price $14.00. Philadelphia, W. B. Saunders Company, 1961.

Florey, Payling Wright and Willis have written excellent books on general or introductory pathology, but this is the first coming in recent years from the Americas, at least in English. The author has a breathtakingly wide range of experience and writes in a fascinating style on subjects which most of us ignore in our haste to get to the study of individual diseases. Every reader, therefore, will find hundreds of facts he had forgotten and as many more which he never knew, such as that in dogs it is impossible to produce myocardial hypertrophy by any means if the adrenals have previously been removed, and that Ascaris produces a substance similar to Anti-A_2 that may explain some of the anemia which those infested with the worm suffer. There are interesting discussions about antibodies against viruses and parasites, a denial that inflammation is a purposeful (that is, defensive) reaction, a good discussion of healing and transplantation, skepticism of the prognostic value of the histologic grading of tumors, a discussion of myocardial hypertrophy, and its failure. The reviewer found the section on pulmonary edema most valuable.

The sole criticism of the book itself is that the illustrations are so small as to be worthless in a high proportion of cases. Undoubtedly, the author's originals were larger, and the publisher must take the brunt of the criticism. The book is absolutely up-to-date, and it is unfortunate that the discussion of the clonal selection theory of acquired immunity is so brief that a reader not previously familiar with it would find it incomprehensible.

This book is for the scientifically oriented physician, whether or not he is a pathologist, who would like to know the background of many subjects he takes for granted such as immunity and hypersensitivity, and who would like to know what new discoveries have been made since he was in medical school. To this end, the more than 2,700 references would make ownership of the work worth while.

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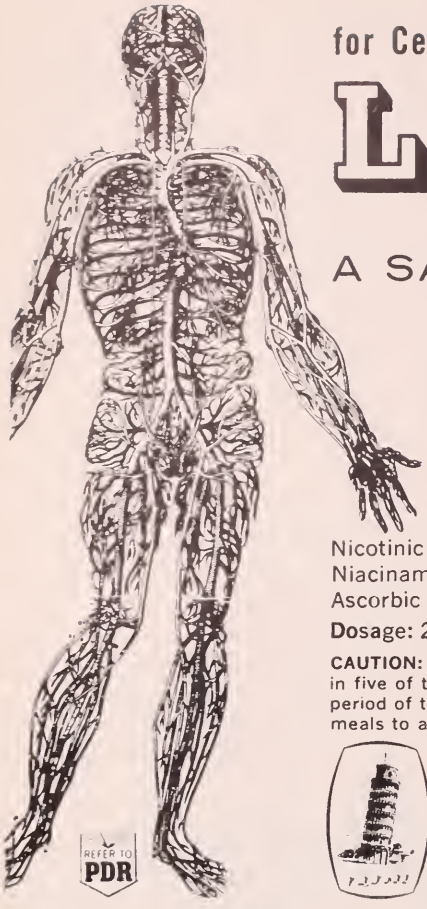
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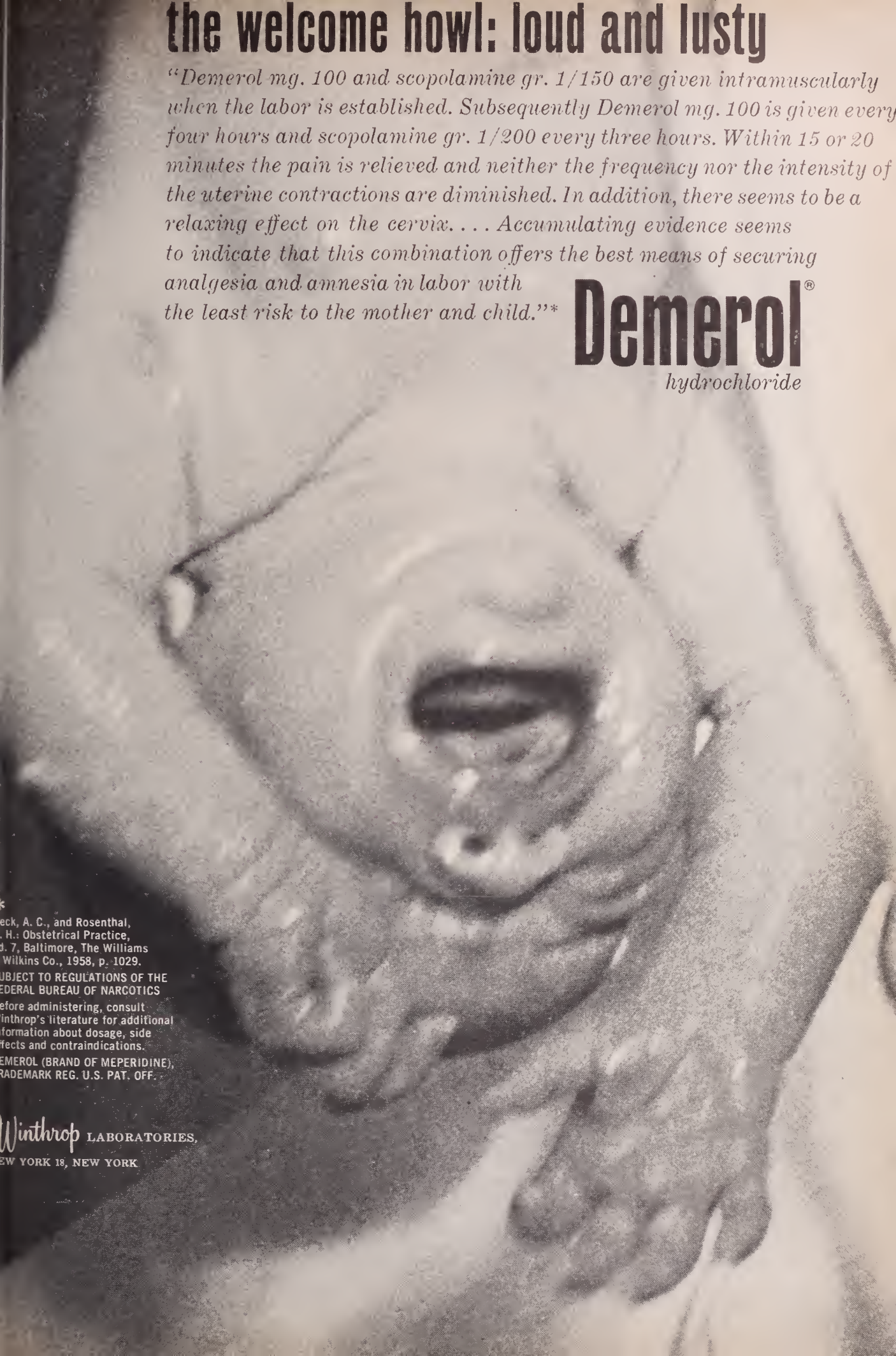
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eck, A. C., and Rosenthal, . H.: Obstetrical Practice, d. 7, Baltimore, The Williams Wilkins Co., 1958, p. 1029.

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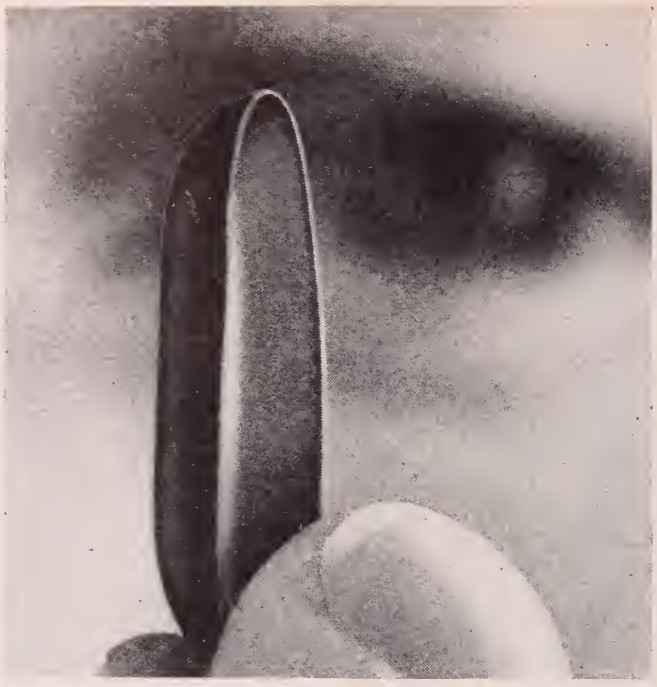


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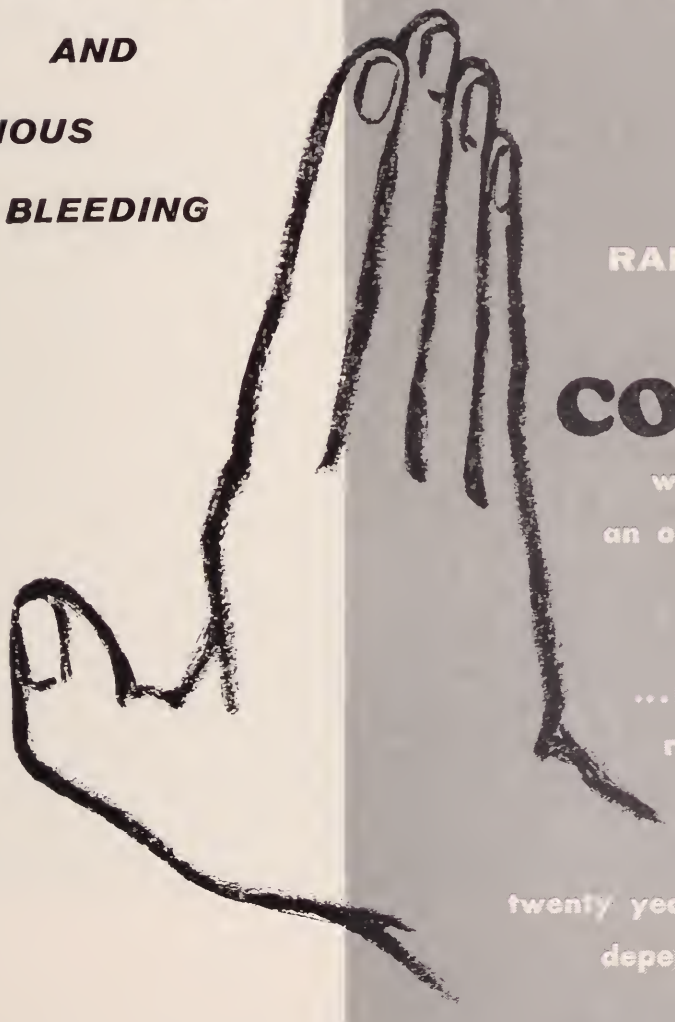
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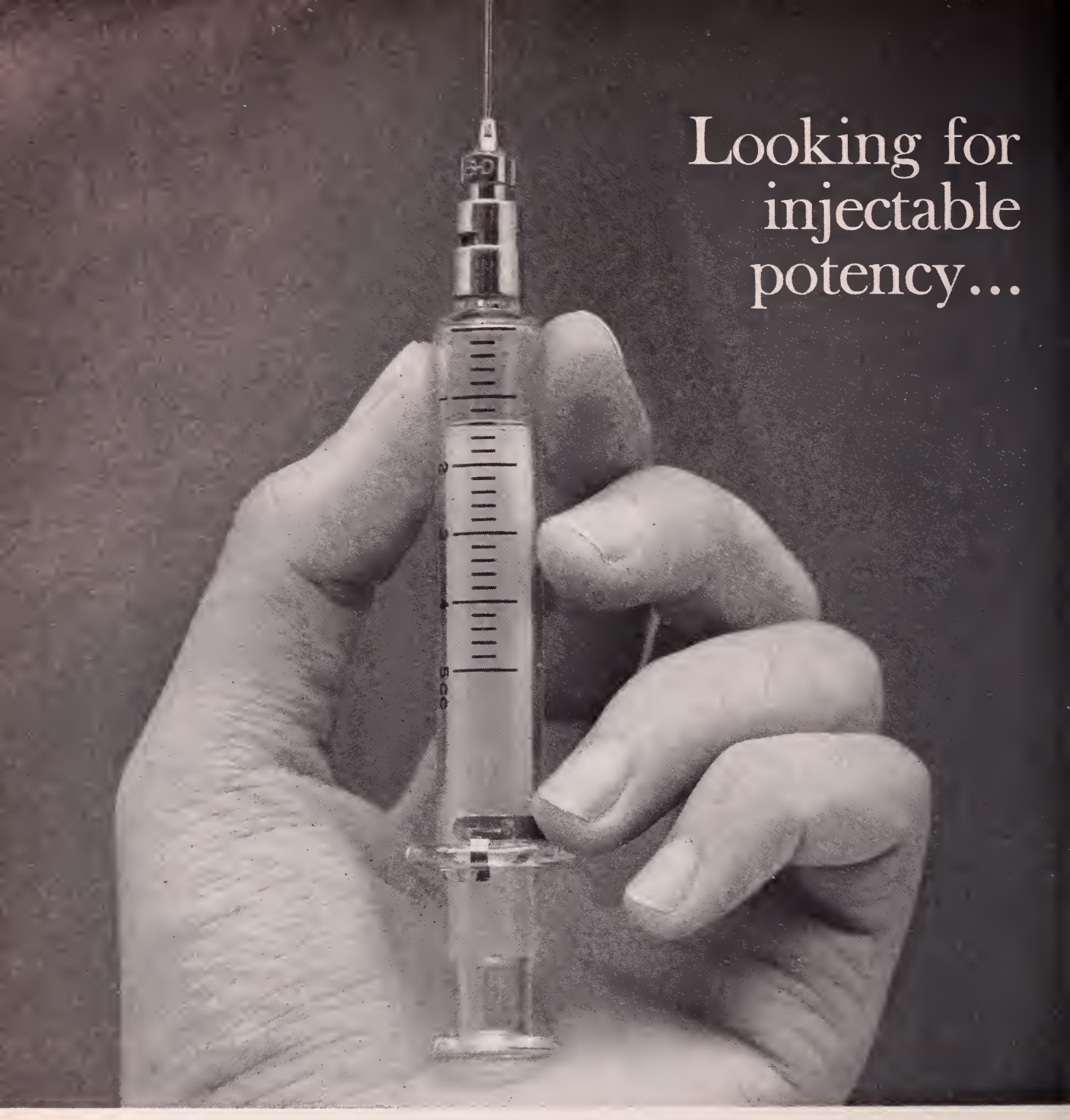
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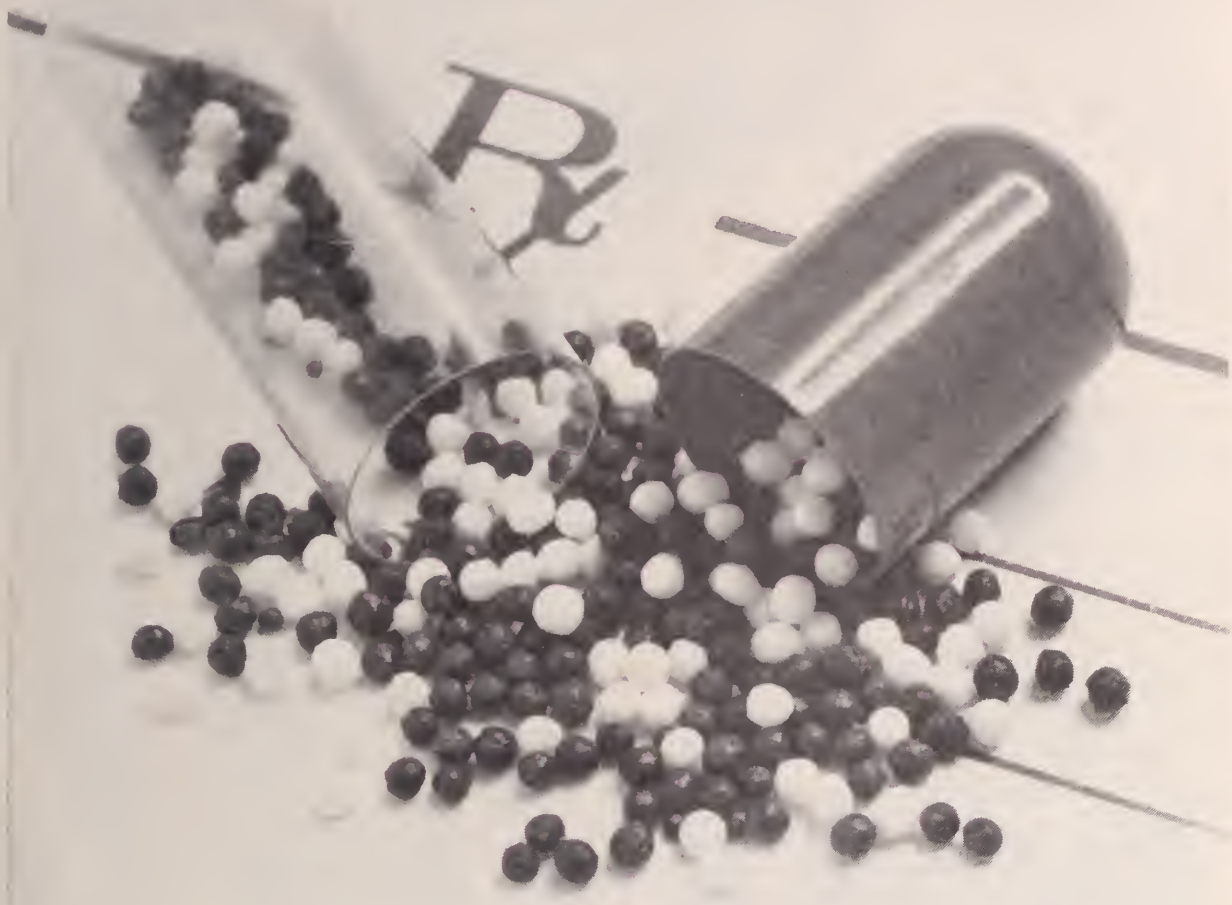
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663 gentle doses of iron in a single capsule, once daily

ONE-IRON™

(capsules of timed-release ferrous fumarate)



the best-tolerated ferrous iron
timed for release in the area of maximum absorption

A single capsule of ONE-IRON—taken once a day by your iron-deficient and even your iron-sensitive patients—sprinkles tiny particles of ferrous fumarate throughout the duodenum and jejunum over a four-hour period for virtually complete and trouble-free absorption.

Not only is maximum hemoglobin regeneration obtained, but the possibility of gastric discomfort, diarrhea or constipation from ionized iron is virtually eliminated.

Moreover, ferrous fumarate itself (the sole active ingredient of ONE-IRON) is better tolerated than ferrous sulfate, succinate or gluconate.[1-3]

Each timed-release ONE-IRON capsule provides ferrous fumarate, 325 mg. (5 grs.), equivalent to 107 mg. of elemental iron.

Dose—one capsule daily with breakfast.

Supplied—bottles of 100 and 1,000 clear and white capsules.

References: 1. Berenbaum, M.C. et al.: Blood 15:540, 1960. 2. Shapleigh, J.B. and Montgomery, A.: Am. Prac. & Digest Treat. 10:461, 1959. 3. Swan, H.T. and Jowett, G.H.: Brit. M.J. 2:782 (Oct. 24) 1959.

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In intestinal "grippe"

prompt 4 way check of diarrhea

- Curbs excessive peristalsis
- Adsorbs toxins and gases
- Soothes inflamed mucosa
- Provides intestinal antisepsis



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EFFECTIVE ANTIDIARRHEAL

FORMULA: *Each 15 cc. (tablespoon) contains:*

Sulfaguanidine U.S.P.	2 Gm.
Pectin N.F.	225 mg.
Kaolin	3 Gm.
Opium tincture U.S.P.	0.08 cc.
(equivalent to 2 cc. paregoric)	

DOSAGE: Adults: Initially 1 or 2 tablespoons from four to six times daily, or 1 or 2 teaspoons after each loose bowel movement; reduce dosage as diarrhea subsides.

Children: ½ teaspoon (=2.5 cc.) per 15 lb. of body weight every four hours day and night until stools are reduced to five daily, then every eight hours for three days.

SUPPLIED: *Bottles of 16 fl. oz. (raspberry flavor, pink color)*
Exempt Narcotic. Available on Prescription Only.

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Before prescribing be sure to consult Winthrop's literature for additional information about dosage, possible side effects and contraindications.





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1. Borota, A., and Grinell, R.N.: J. Amer. Geriatrics Soc., 10:413, 1962.
2. Spoor, H. J.: N.Y. State J.M. 58:3292, 1958.
3. Lubowe, I. I.: Western Med. 1:45, 1960.
4. Weissberg, G.: Clin. Med. 7:1161, 1960.

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Boutonneuse fever is a tick-borne, acute, febrile disease often affecting children. The bite site becomes a small, necrotic ulcer. A striking macular or maculopapular eruption develops on the trunk, palms and soles. Onset is sudden, with chills, high fever, violent headache and lassitude. The high temperature—up to 103° F.—characteristic of both boutonneuse fever and bronchopneumonia, drops rapidly following initiation of Terramycin therapy.

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CHELATED IRON-MINERALS and VITAMINS

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Iron (as Ferrous Betaine Citrate)	30 mg.
Cobalt (as Cobaltous Betaine Citrate)	0.1 mg.
Manganese (as Manganese Betaine Citrate)	1.0 mg.
Zinc (as Zinc Betaine Citrate)	1.25 mg.
Magnesium (as Magnesium Betaine Citrate)	6.0 mg.
Vitamin B-1	1.5 mg.
Vitamin B-2	1.2 mg.
Vitamin B-12	6.0 mcg.
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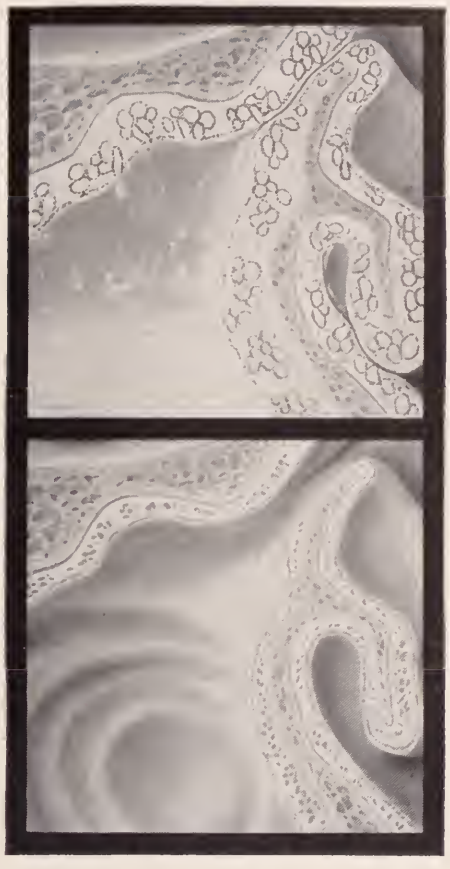
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When there is nasal turgescence, tiny orifices of sinus ostia tend to clog. Neo-Synephrine nasal solutions and sprays reduce edematous tissues on contact to provide prompt relief. As turbinates shrink, obstructed sinus ostia open, drainage and breathing become freer and the boggy feeling of a cold disappears.

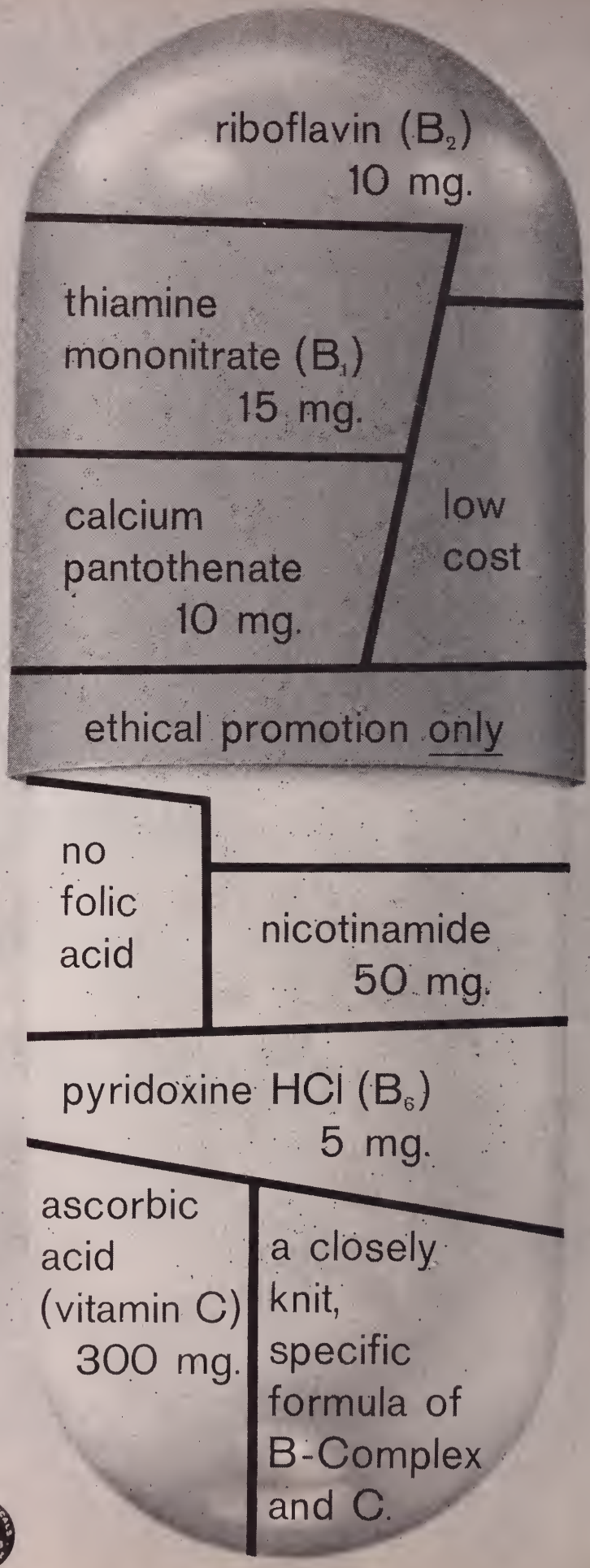
Delicate respiratory tissue and its natural defenses are not harmed by exceptionally bland Neo-Synephrine; systemic effects are nil; it does not sting. For years it has been recommended for prevention and treatment of sinusitis.[1-3] Repeated applications do not lessen effectiveness.

Available in plastic nasal sprays for adults (½%) and children (¼%), in dropper bottles of ⅛, ¼ or 1 per cent.

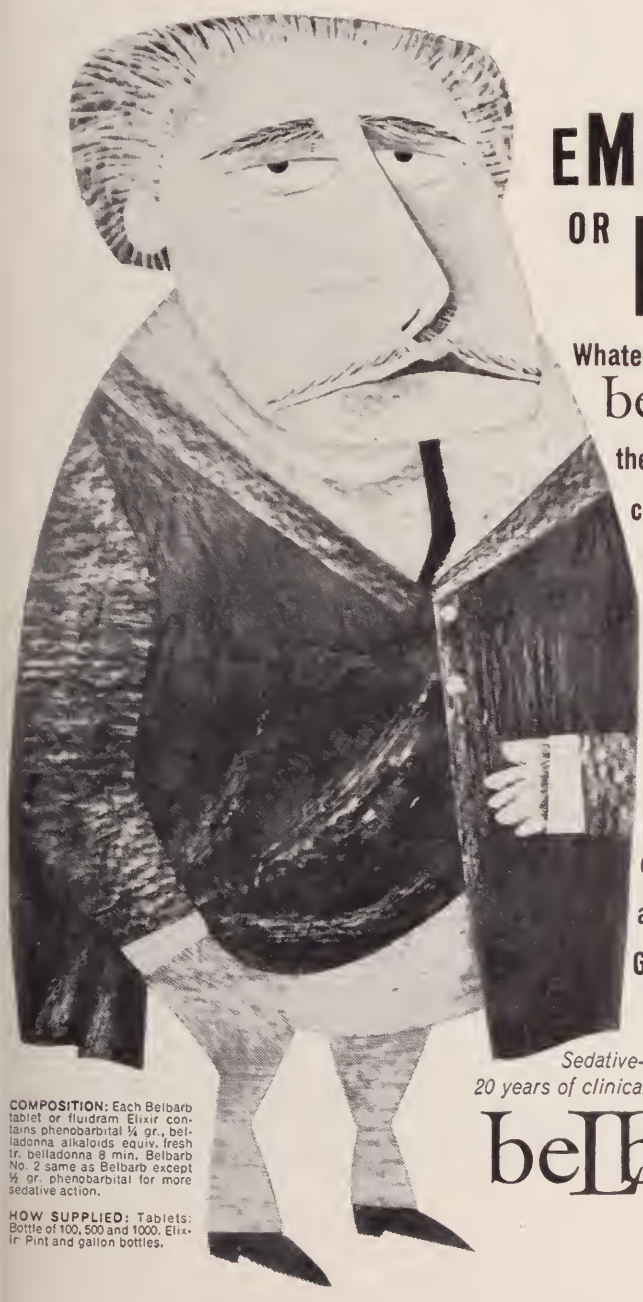
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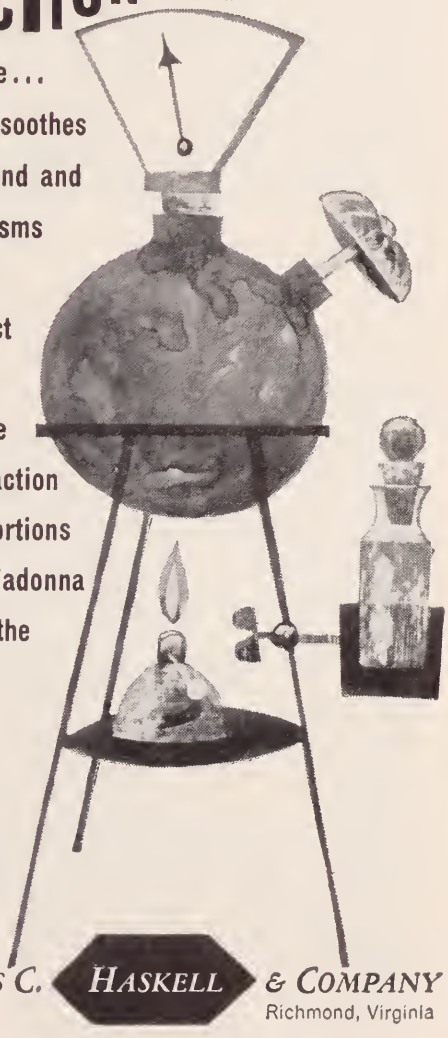


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bellbarb® soothes the agitated mind and calms G-I spasms through the central effect of phenobarbital and the synergistic action of fixed proportions of natural belladonna alkaloids on the G-I tract.



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20 years of clinical satisfaction

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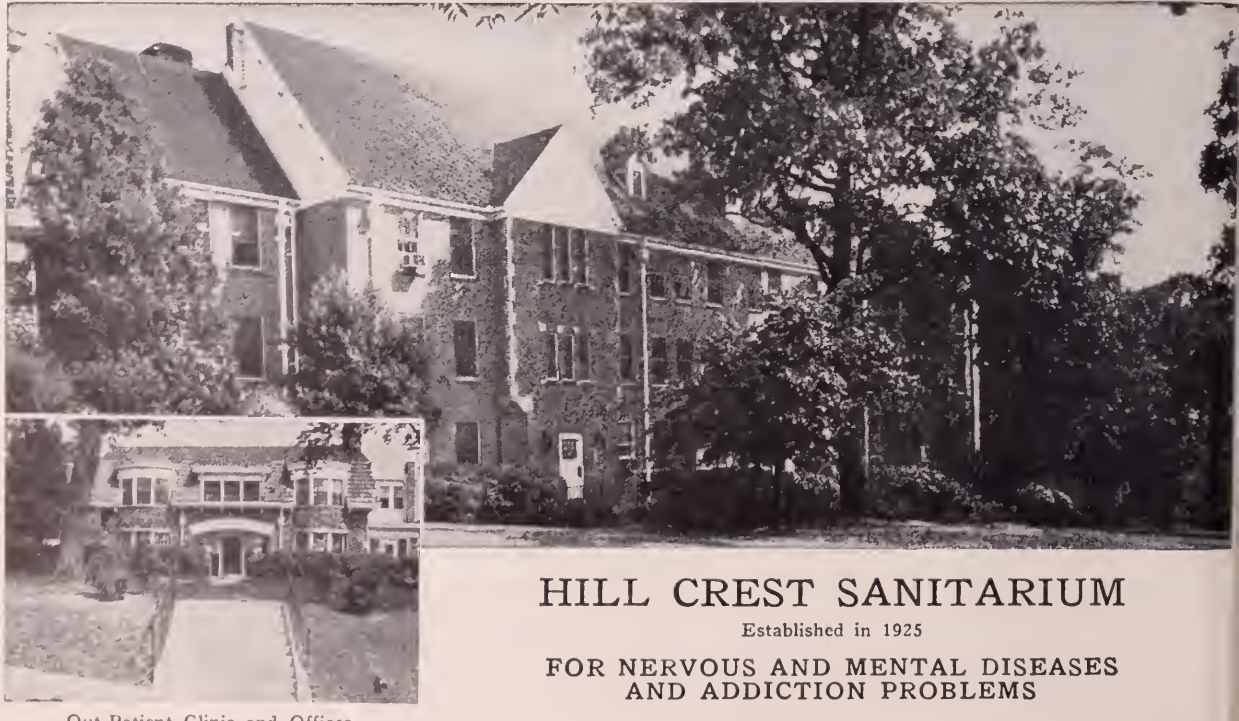
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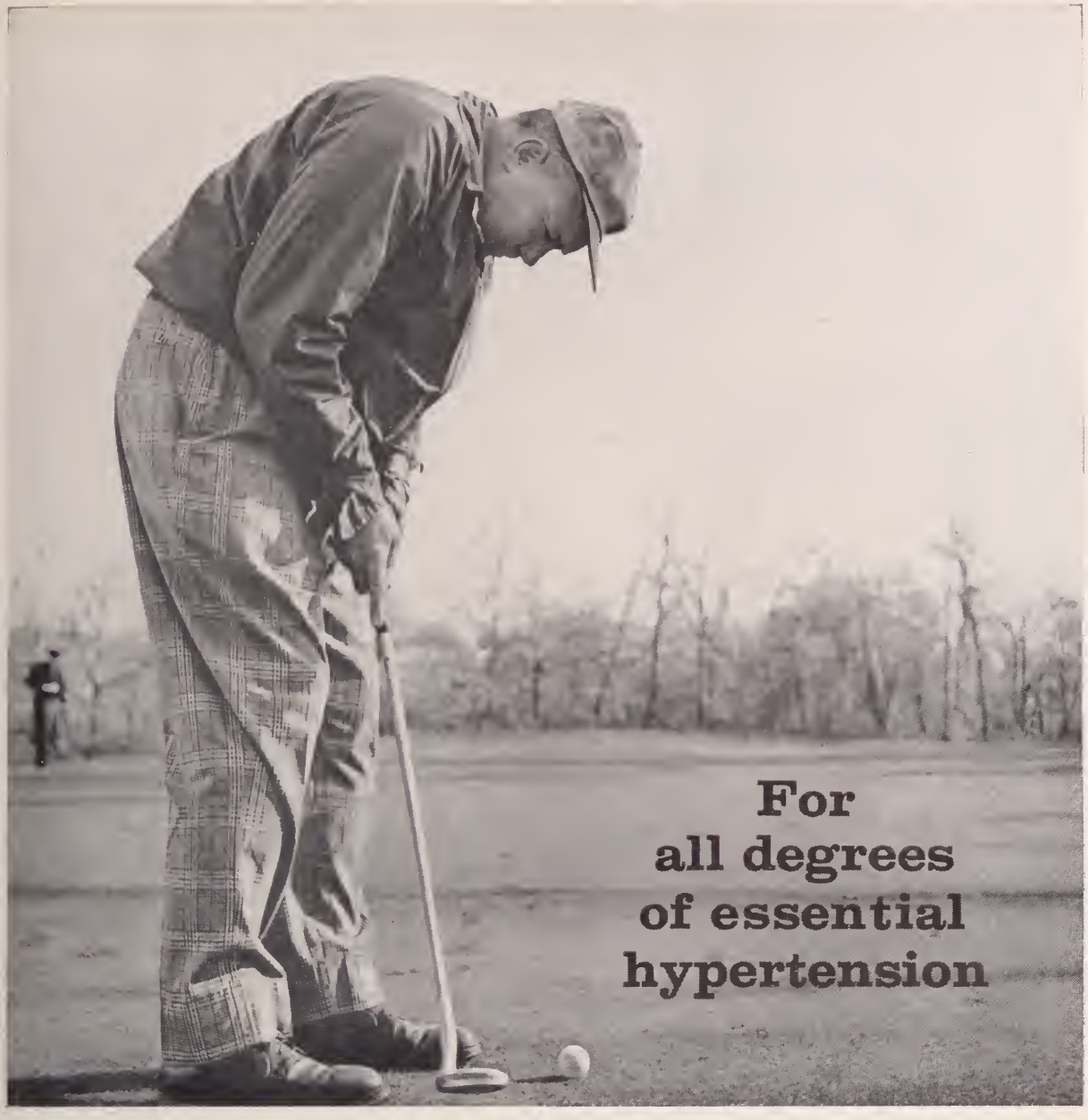
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†Hutchison J. C.: Current Therap. Res. *2*:487 (Oct.) 1960.

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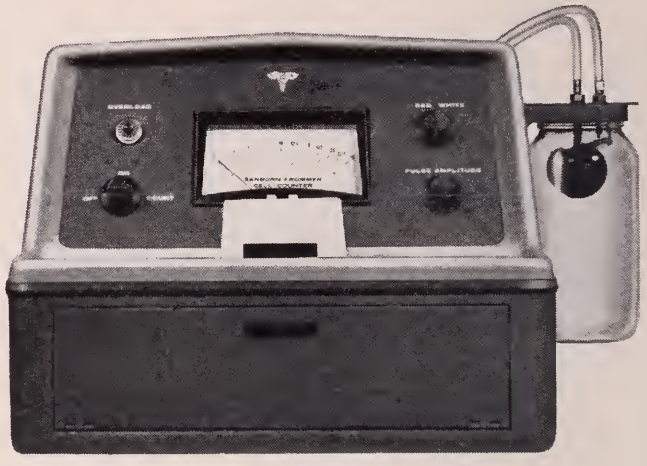
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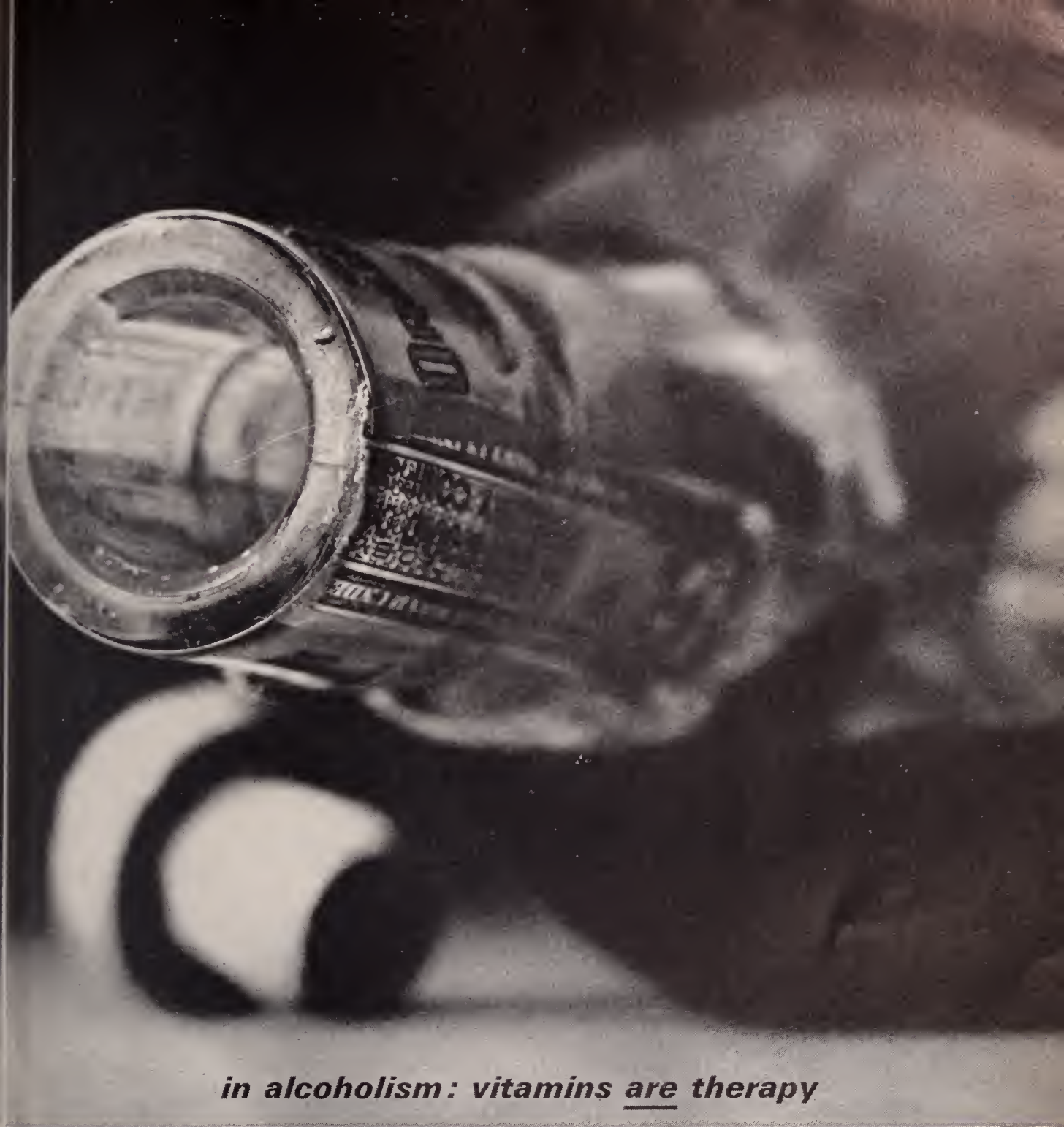
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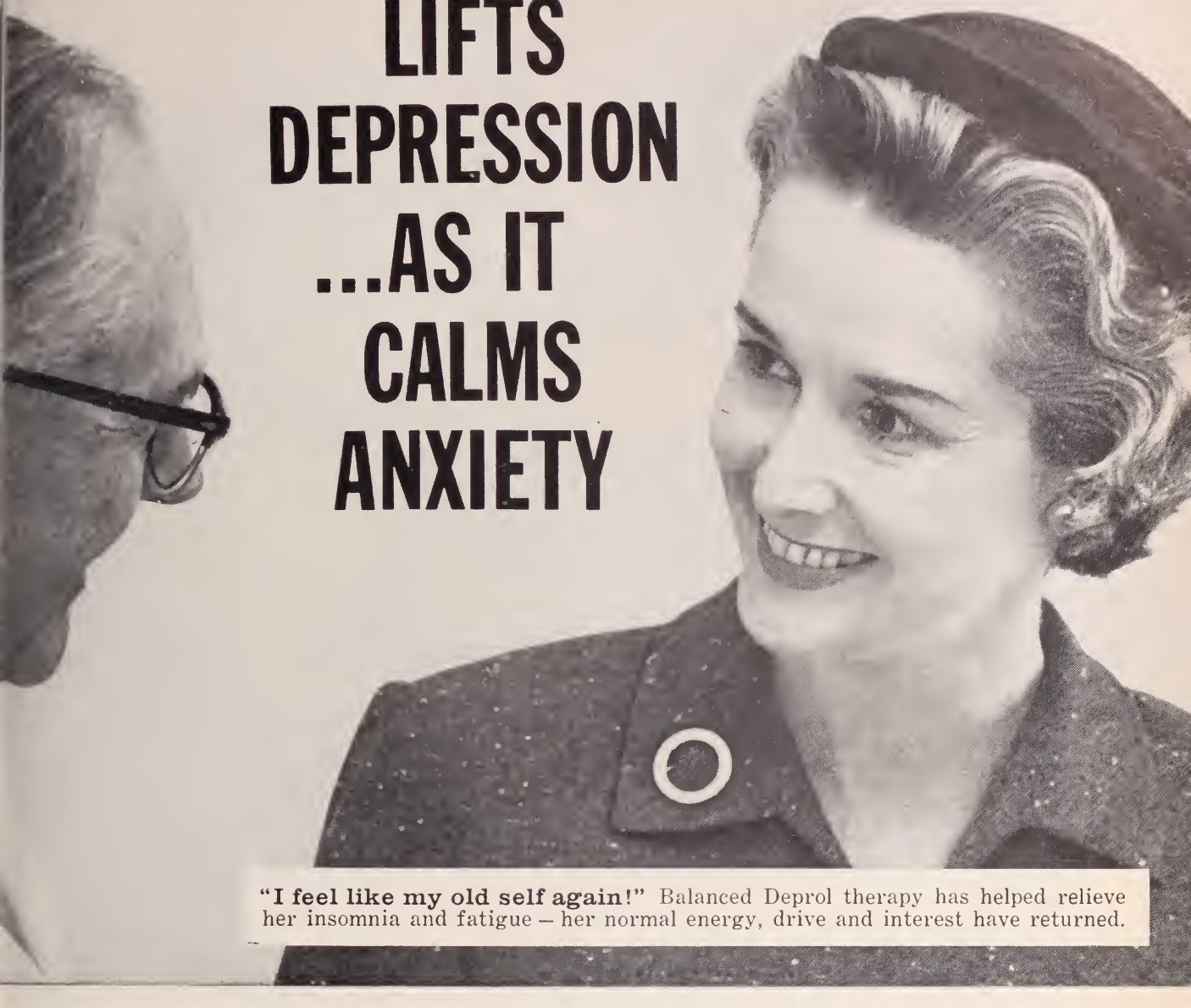
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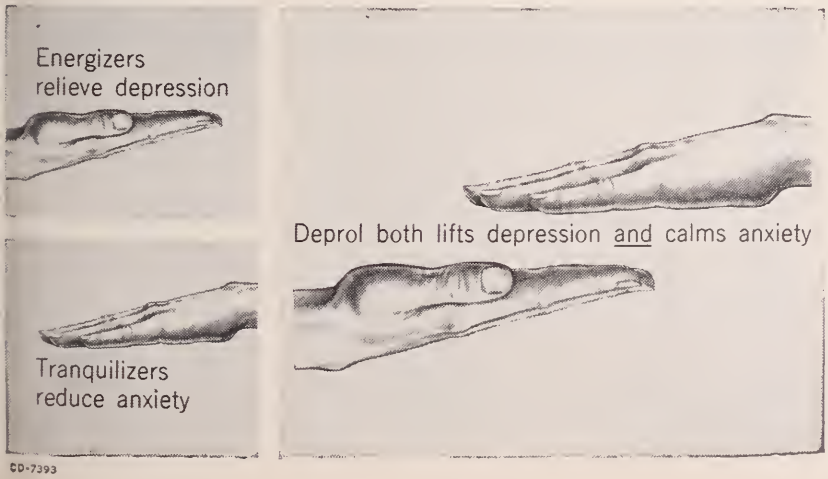
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Supplied: Bottles of 50 light-pink, scored tablets.

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Complication: Pocketbook syndrome

New therapy: HEXADROL®

Dexamethasone 'Organon'

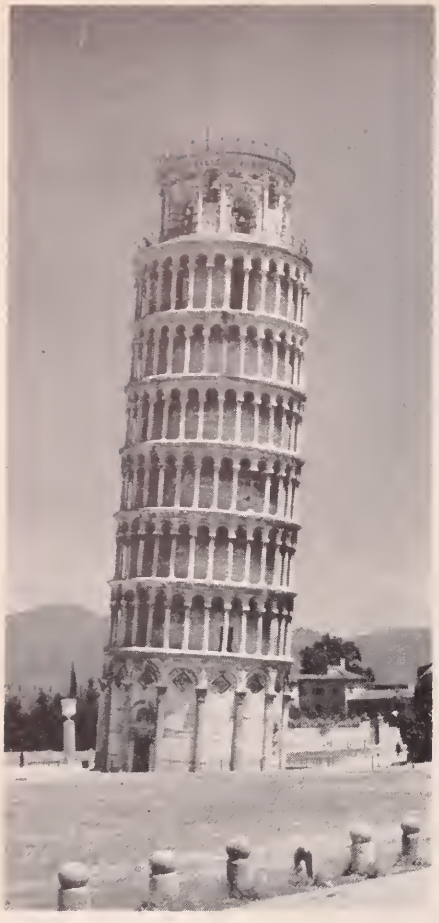
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Cost-to-patient? Greatly reduced! Why not check with your local pharmacist on prescription cost to your patients?

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When treatment for

IMPOTENCE

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ANDROGEN-THYROID-COMBINATION

in two convenient dosage forms

ANDROID	ANDROID-H.P. (High Potency)
Each yellow tablet contains:	Each orange tablet contains:
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Thyroid Ext. (1/6 gr.) ....10 mg.	Thyroid Ext. (1/2 gr.) ....30 mg.
Glutamic Acid .....50 mg.	Glutamic Acid .....50 mg.
Thiamine HCl .....10 mg.	Thiamine HCl .....10 mg.

INDICATIONS: **Impotence in male.**

AVERAGE DOSE: One tablet three times daily.

AVAILABLE: Bottles of 100 and 500 at your pharmacy.

CAUTION: Not to be used when testosterone is contra-indicated. Federal law prohibits dispensing without prescription.

1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

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1. Stevenson, L.E.: M. Ann. District of Columbia *30*:409 (July) 1961.



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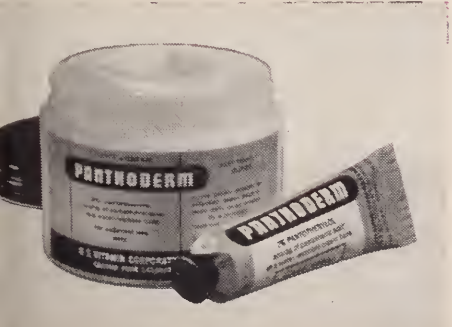


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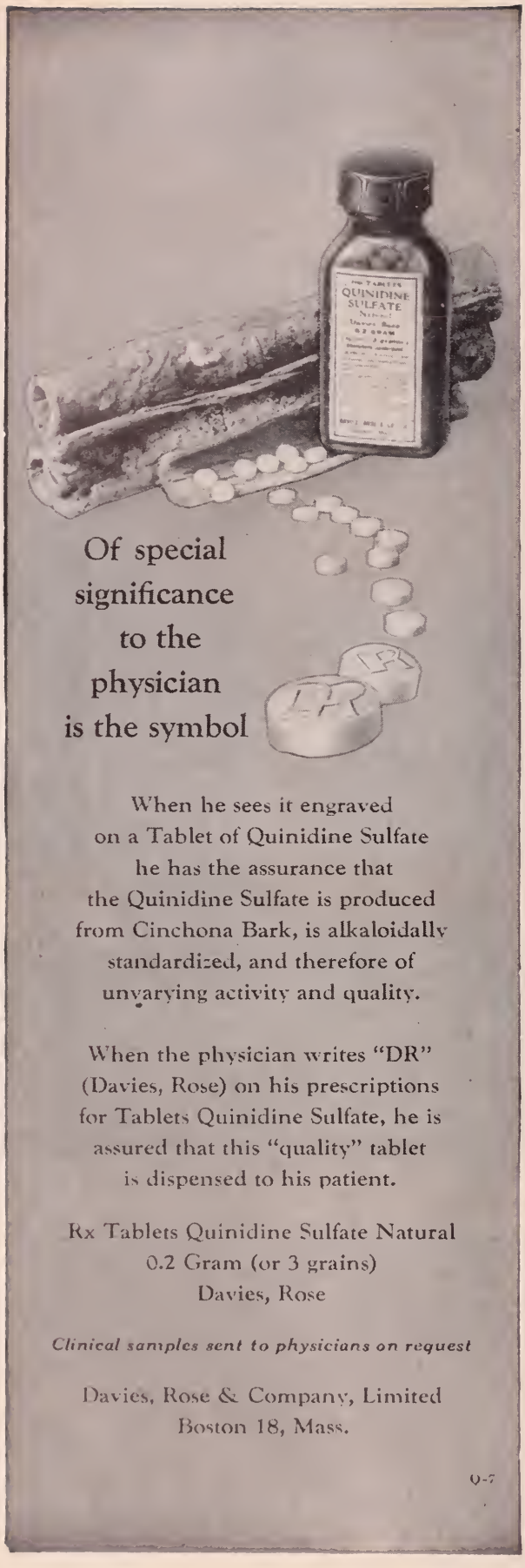
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Vol. XLIX, No. 5

The JOURNAL of the Florida Medical Association

Cat Scratch Disease

Anesthetic Problems in Patients with Emphysema of the Lungs

Research Progress at Tulane University School of Medicine

Overstretched Lungs

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REFERENCES: (1) Roseman, E.: Neurology **11**:*912, 1961. (2) Bray, P. F.: Pediatrics* **23**:*151, 1959. (3) Chao, D. H.; Druckman, R., & Kellaway, P.: Convulsive Disorders of Children, Philadelphia, W. B. Saunders Company, 1958, p. 120. (4) Crawley, J. W.:* M. Clin. North America **42**:*317, 1958. (5) Livingston, S.: The Diagnosis and Treatment of Convulsive Disorders in Children, Springfield, Ill., Charles C Thomas, 1954, p. 190. (6) Ibid.:* Postgrad. Med. **20**:*581, 1956. (7) Merritt, H. H.:* Brit. M. J. **1**:*666, 1958. (8) Carter, C. H.:* Arch. Neurol. & Psychiat. **79**:*136, 1958. (9) Thomas, M. H., in Green, J. R., & Steelman, H. F.: Epileptic Seizures, Baltimore, The Williams & Wilkins Company, 1956, p. 37. (10) Goodman, L. S., & Gilman, A.: The Pharmacological Basis of Therapeutics, ed. 2, New York, The Macmillan Company, 1956, p. 187.*

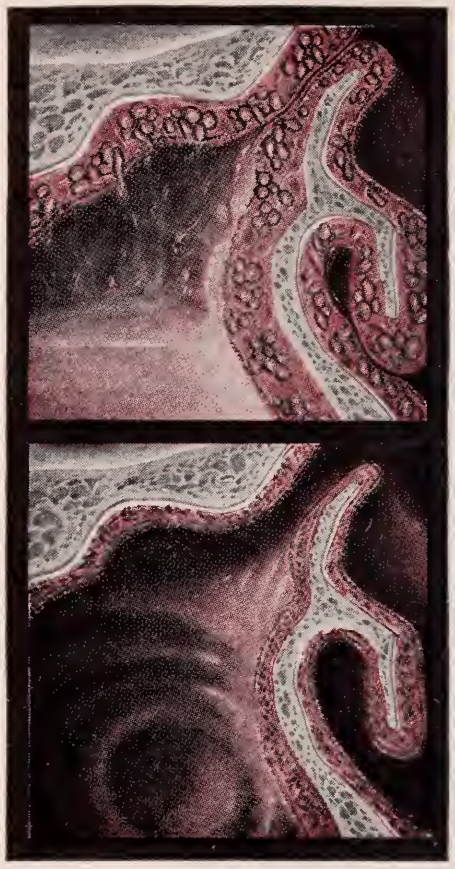
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1. Grant, L. E.: Coryza and nasal sinus infections, **Clin. Med. & Surg.** 42:121, March, 1935. 2. Putney, F. J.: Sinus infection, in Conn, H. F. (Ed.): Current Therapy 1952, Philadelphia, W. B. Saunders Company, 1952, p. 110. 3. Simonton, K. M.: Current treatment of sinusitis, **Journal-Lancet** 79:535, Dec., 1959.

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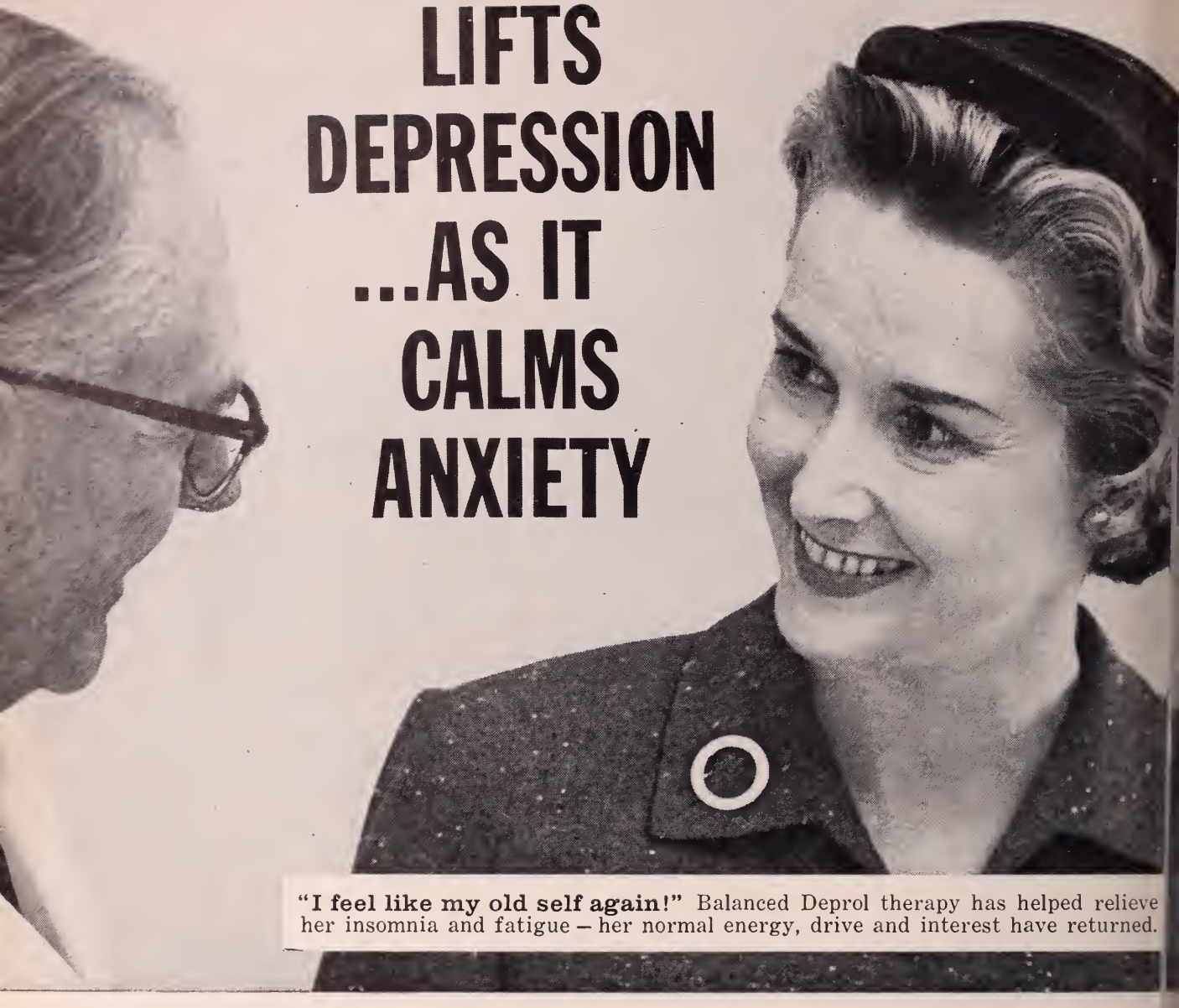
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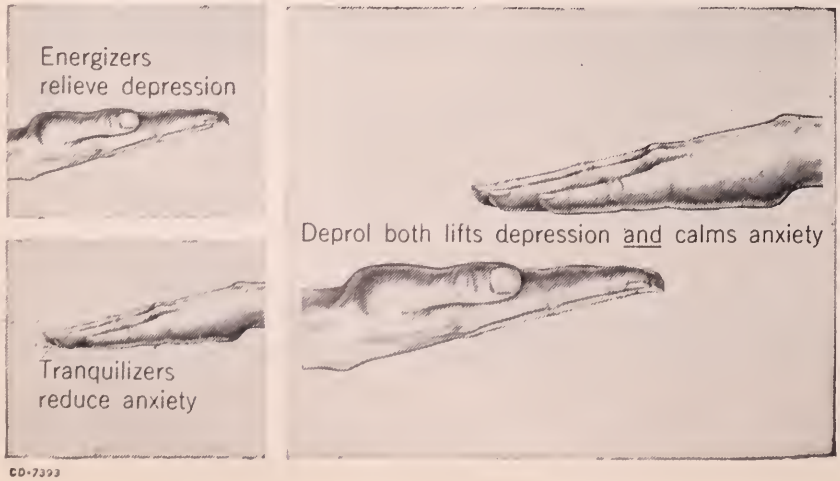
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2. Albertson, H.A., Trout, Jr., H.H., Daily, F.W.: The American Journal of Surgery (Sept.) 1956.

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3. Goldsmith, J.W.: Minn. Med. (Feb.) 1957.

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4. Codling, J.W.; Lowden, R.J.: Northwest Med. (March) 1958.

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5. Bentley, M.D.: Journal of the Mich. State Med. Soc. (Sept.) 1959.

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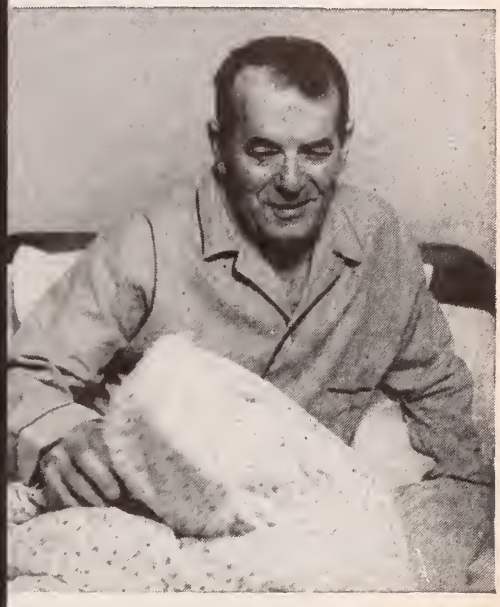


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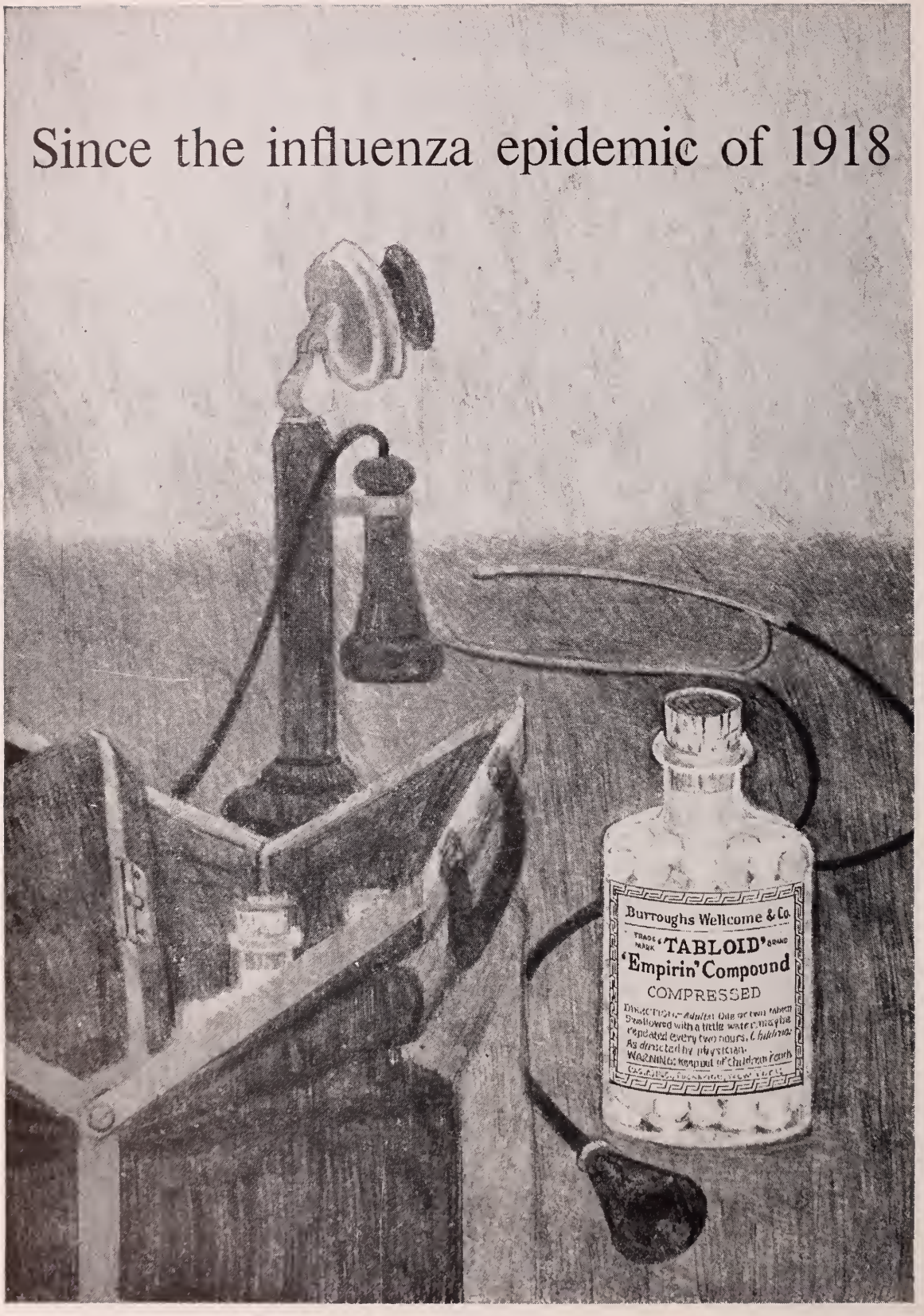
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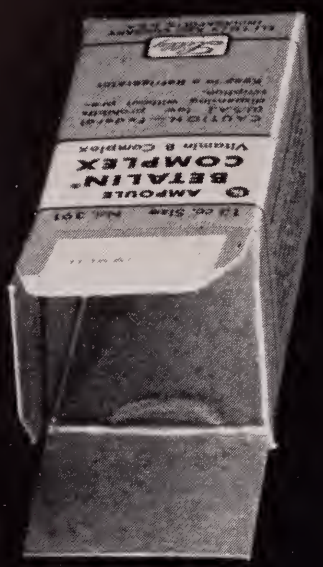
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The JOURNAL
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Cat Scratch Disease
A Clinical Concept
Analysis of Thirty-Four Cases

Warren W. Quillian, M.D.
James W. Lancaster, M.D.
and Warren W. Quillian II, M.D.
Coral Gables

The purpose of this presentation is to emphasize a clinical entity which, though variable in its manifestations, may be suspected or recognized without involved procedures. Our series of 34 patients includes only children from two and one-half to 12 years of age, of whom 22 were girls. In about half of them the disease was diagnosed and they were treated at an urban medical center in Tennessee; the remainder were observed in a South Florida pediatric practice.

Brief History

Although cat scratch disease was recognized by Foshay in Ohio and by Debré in France as early as 1932, these observers did not then publish their findings, hoping first to identify the etiologic agent. The earliest description of the disease by Greer and Keefer[1] in 1951 confirmed these first impressions. Since that time, many hundreds of case reports and reviews have been published, as attested by an extensive bibliography on the subject.[2,3] The disease is not a rare one. Early recognition involves an awareness of the symptom complex and a high index of suspicion on the part of the clinician.

Etiology

The etiologic factor responsible for cat scratch disease has intrigued clinicians and microbiologists since the original description by Greer and Keefer.[1] Because of certain similarities between it and lymphogranuloma, not the least of which are pathological findings in lymph nodes, efforts have been made by research investigators to identify the causative agent as one of the latter group of viruses. Armstrong, Daniels, MacMurray and Turner[4] used a commercially prepared antigen (Lygranum - complement fixation) for tests. They concluded that a positive reaction to Lygranum C.F. is not diagnostic for cat scratch disease and affords no convincing evidence that this disorder should be classified in the lymphogranuloma psittacosis group.[4] Boyd and Craig,[5] in 1961, isolated a photochromogenic acid-fast bacillus from involved lymph nodes in seven patients suspected of having cat scratch disease. Professor Robert Debré,[6] a pioneer investigator in the subject, in March 1962 questioned the validity of this work. No further clinical or biologic data have yet been published confirming the evidence presented by Boyd and Craig.

Dodd and his co-workers[7] at Ohio State University, in 1960, isolated a hemagglutinating virus from pus obtained from human patients with cat scratch disease, using red blood cells of rabbits and rats in allantoic fluid from chick embryos. Inactivation of several inhibitors by glucose, acetone and hydrochloric acid enabled these investigators to determine that the virus was antigenically related to herpes simplex. It was not virulent for chick embryos and not cytopathogenic in tissue cultures. The virus did not produce lesions when inoculated upon rabbit corneas. A personal communication from Dr. Dodd,[8] in March 1962, states that they have, thus far, been unable to demonstrate a hemagglu-

Read before the Florida Medical Association, Eighty-Eighth Annual Meeting, Miami Beach, May 10, 1962.

Table 1. — Cat Scratch Disease

Sites of Involved Lymph Nodes	
Axillary	11
Head and neck	12
Inguinal or femoral	4
Multiple Combinations	
Preauricular-axillary	3
Epitrochlear-axillary	4

Table 2. — Sites of Involved Lymph Nodes
(Spaulding, W. B., and Hennessy, J. N.[12])

Single Area Only	
Axillary	32
Head and neck	17
Inquinal or femoral	15
Above scapula	1
Epitrochlear	1
Site not recorded	2
More Than One Area	
Axillary and epitrochlear	7
Axillary and cervical	3
Bilateral inguinal	2
Bilateral axillary and bilateral cervical	1
Axillary, epitrochlear and pectoral	1
Epitrochlear and cervical	1

Table 3. — Cat Scratch Disease
34 Cases

Sex: Male 12 Female 22

	Yes	No	Not Done
Primary lesion	25	9	
Fever > 101 F.	8	26	
History of cat contact	25	9	
Biopsy	2	32	
Suppuration	4	30	
Skin test	14	2	18
Tuberculin test	0	17	17

WBC: high 27,000, low 7,000

tinin inhibiting antibody in human patients. Nevertheless, it is significant that in rabbits immunized with the virus a positive delayed type skin test reaction has developed. Rabbits immunized with the pus have given a positive reaction to the skin test for the virus. The latter has been isolated from the saliva and claws of the cat, but never from the hair or internal organs. Further work is in progress, and it is hoped that the etiologic agent producing cat scratch disease may soon be positively identified.

Symptoms and Clinical Signs

The lesion of inoculation, sometimes small or overlooked altogether, usually involves the skin. In the present series, however, there were six instances of primary injury to the conjunctival mucosa, producing the typical oculoglandular syndrome of Parinaud.[9,10] Commonly, within a week the initial lesion became inflamed or ulcerated. Within 10 to 30 days regional lymphadenopathy resulted. As illustrated in table 1, one or more nodes were affected. When the initial inoculation is on the extremities, the nodes are unilaterally involved; when on the face and neck, there may be multiple or bilateral lymphadenopathy.[11] Lymphangitis did not occur among these patients. Table 2 represents the frequency of involved sites, as reported by Spaulding and Hennessy[12] in a study of 83 cases over a period of four years. Distribution of lymphadenopathy was predominantly in the axillary region, head and neck. This, also, was our experience (table 1).

Variable degrees of constitutional symptoms were noted. These included fever, general malaise, headache and anorexia. The elevation of body temperature was not directly comparable with the size of the affected nodes or with suppuration and exceeded 101 F. in only eight of the 34 cases studied (table 3). Suppuration developed in four instances, but in 30 cases the enlarged nodes seemed to undergo involution spontaneously, without resort to needle aspiration or surgical procedure. A history of cat contact or scratch was obtained in 25, representing about three-fourths of the cases studied.

Severe complications did not occur among this group of patients. Systemic symptoms were seldom disabling, except for the prolonged, tender enlargement of the affected nodes. Others have reported erythema nodosum,[1,3,12] encephalopathy[12-15] and thrombocytopenic purpura.[16] The incidence of Parinaud's oculoglandular syndrome in this small series is relatively high.[10]

Observers have noted a seasonal prevalence of the disease in winter, especially in Canada and Nova Scotia.[12,17] Figure 1,[18] indicates a larger number of cases occurring from October to January, with very few during the summer months. The distribution of cases in the present series does not reveal any remarkable seasonal prevalence (fig. 2). Perhaps differences in climate have influenced this seeming dissimilarity because of the effects which weather changes may produce upon the habits of cats and humans.

Diagnosis

The usual type of the disease, with a history of cat contact, initial lesion, clinical course, regional lymphadenopathy and negative finding for other infections, does not necessarily require confirmation by a local skin test for reasonable assurance of an accurate diagnosis. Warwick and Good,[18] in 1960, pointed out that the over-all incidence of positive skin test reactions to specific

antigen was 4.4 per cent in normal, well persons. This would indicate that the test is valid in only about 95 per cent of suspected persons. Control studies on veterinary personnel showed an increased frequency of positive tests. Other criteria, such as history, clinical signs, and biopsy and laboratory studies of excised nodes or of pus aspirated from them, may be of equal importance in the establishment of a diagnosis,[18] but the specific skin test constitutes a valuable confirmatory procedure. It is of great importance in atypical variations of the disease.

The antigen is obtained from suppurative lymph nodes of patients with known cat scratch disease. The technique for preparation is simple,[18] Daeschner and his associates,[19] Bettley and Fairburn[20] and others emphasized the specificity of this antigen as early as 1953. Unfortunately, proved antigen is often not readily available and cannot be obtained commercially. It would be most helpful locally if physicians of this state would have a laboratory technician or pathologist convert any suspected material into antigen for testing. Need for suppurative products is essential for continued preparation of diagnostic material, and as a source for further etiologic studies. In only 16 cases of the series were we able to obtain antigen for skin tests, and in 14 the reaction was positive. It has been suggested that there may be different strains of the causative agent with little or no cross antigenicity.[18] Exclusion tests for infectious mononucleosis, brucellosis, tuberculosis, tularemia and lymphogranuloma venereum are necessary only in unusual or atypical cases. Final diagnosis depends upon a careful history, correlation of histopathologic observations, clinical studies and specific skin tests. Routine blood counts were not helpful to us as a diagnostic aid.

Pathology

The pathological changes of cat scratch disease were well described by Guttman[21] in 1955. They consist essentially of proliferation and swelling of reticuloendothelial cells in lymph nodes, followed by exudation of leukocytes and microscopic abscess formation, with cellular debris surrounded by a border of epithelioid cells. Homogenization of these necrotic centers into eosinophilic masses is accompanied by an inflammatory reaction of the capsule and surrounding fatty tissue.

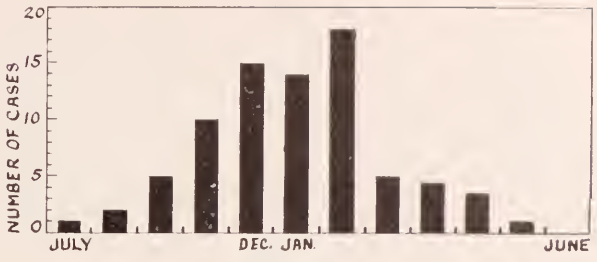


Figure 1

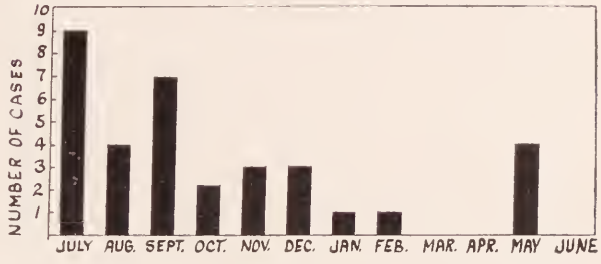


Figure 2

Treatment

Treatment by us has been largely symptomatic. Spontaneous recovery eventually occurred, as has been noted by others.[11] Antibiotic therapy seemed to be of little consistent benefit. Surgical removal of the inflamed nodes, with total excision and closure, has been recommended by Small and Sniffen,[22] in an effort to shorten the course of the illness. Biopsy or needle aspiration of a fluctuant lymph node was performed by us when indicated, primarily to obtain potential material for skin testing. It was our clinical impression that enlarged glands thus treated seemed to regress more rapidly.

Summary

Typically, cat scratch disease may be recognized on the basis of known contact with or injury from cats, a primary lesion of inoculation, regional lymphadenopathy, and variable systemic manifestations.

A specific skin test is valuable as a confirmatory diagnostic aid. Correlation of a careful history, clinical findings and histopathologic studies is of equal importance.

This series of 34 cases was relatively free from severe complications. Primary involvement of the conjunctiva in six of them, with development of Parinaud's oculoglandular syndrome, tends to confirm the causative agent of cat scratch disease as the probable etiologic factor in this type of granulation conjunctivitis associated with lymphadenitis.

Significant clinical observations and management are discussed.

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140 Alhambra Circle.

Anesthetic Problems in Patients with Emphysema of the Lungs

J. S. Gravenstein, M.D.
GAINESVILLE

Surgical patients with generalized pulmonary emphysema present the anesthetist with a number of frequently very difficult problems. The failure to recognize these problems often leads to complications during anesthesia, usually to an increased morbidity postoperatively, and sometimes to the demise of the patient. Generalized emphysema in surgical patients appears to become more prevalent; a discussion of the factors responsible for the hazards which the patient faces during and following anesthesia is therefore appropriate.

Generalized emphysema can be classified into a senile and an obstructive type. In this discussion, this classification is not too helpful, and it will be readily apparent that the loss of lung elasticity common to both types is responsible for much of the trouble. Obstruction added to emphysema aggravates the difficulties.

The problems presented by the emphysematous patient will be discussed under the four headings of difficulties arising from (1) the disturbed mechanics of breathing, (2) disturbed gas exchange, (3) disturbed circulation, and (4) impaired ability to handle secretions.

From the Division of Anesthesia of the University of Florida College of Medicine, Gainesville.

Disturbed Mechanics of Breathing

Two factors are responsible for the process of exhalation. One is the elasticity of the thoracic cage, which, if unopposed, tends to increase the volume of the thorax. The other is the elasticity of the lungs, which, if unopposed, would result in collapse of the lung. In health, these two elastic forces oppose each other, and in the absence of muscle action, they cancel each other when the thorax is in the resting end-expiratory position. Since normal expiration is entirely passive, not requiring muscle activity, it is feasible to paralyze a healthy patient with a muscle relaxant and to ventilate him simply by pushing air into the lungs during inspirations, permitting exhalations to proceed spontaneously. This process changes if the elasticity of the lung is de-

creased and insufficient to expel air through narrowed bronchi. Hence, two things will happen: (a) in obstructive emphysema the patient finds a new end-expiratory resting position with more air in his lungs than is normal (functional residual volume is increased), and (b) he uses muscle power for expiration, thereby substituting active muscle contraction for the lost lung elasticity. This active "pushing air out" with every exhalation, of course, becomes mandatory if appreciable obstruction to the air flow exists in addition to loss of elasticity. Paralyzing such a patient with a muscle relaxant inevitably poses a threat to his life. Without expiratory muscle power assisting the patient's feeble elastic forces of the lung, exhalation is prolonged beyond acceptable limits. Artificial ventilation by positive pressure will be next to impossible, because the lungs are still inflated from the previous breath. The patient will suffocate with a chest full of air.

This process can be illustrated in the following case:

A 63 year old man was admitted because of a two day old incarceration of an inguinal hernia. The abdomen was tight and distended. Bowel sounds were absent. The patient had a barrel chest. Respiration appeared labored. The abdomen rose with every exhalation, indicating contractions of the abdominal muscles during expiration. The surgeon anticipated a difficult task of exposure and exploration, and a very difficult subsequent closure of the abdomen. The anesthetist thought he could help with a relaxant; the patient had refused local or spinal anesthesia. Anesthesia was induced with cyclopropane, recommended by the anesthetist because of the speed of induction and high oxygen concentration possible with cyclopropane anesthesia. He gave a muscle relaxant for intubation, and he planned subsequently to continue with an intravenous drip infusion of the relaxant drug. As soon as the relaxant was given, the anesthetist reported difficulties in ventilating the patient. "I cannot get enough air into this patient, and whatever I get in does not come out again" was the anesthetist's complaint. The patient began to perspire profusely, then became hypotensive, and five minutes later, the first cardiac arrest occurred. Cardiac massage through the diaphragm was successful, but another arrest occurred in some 10 minutes. When the relaxant drug wore off, ventilation improved, and the operation was successfully completed under ether anesthesia without relaxants. The patient survived.

This case history exemplifies a number of factors which will be touched upon. Firstly, of course, it demonstrates that paralyzed patients cannot exhale if they have lost the elasticity of their lungs, particularly if bronchial obstruction opposes the remaining weakened elastic forces of the lungs. Hypercarbia and hypoxia result.

Respirators with a negative phase have been employed in these instances[1] in order to pull the air out actively. They cannot, however, always substitute for expiratory muscle action. This inability is especially true in patients with a significant degree of bronchial obstruction. Collapse of narrowed bronchi with air-trapping behind the obstruction occurs all too easily during the aspiration cycle of the respirator. A respirator without a "negative" phase, of course, is no better than positive pressure by hand for the problem under discussion.

Disturbed Gas Exchange

Since the resting end-expiratory position of the emphysematous chest resembles normal inspiration rather than expiration, more air remains in the lung after every expiration, and consequently gas exchange is impaired. Narrowing of bronchial lumina and obstruction of gas flow result in uneven ventilation, further impairing the removal of carbon dioxide and the oxygenation of the blood. Patients with obstructive emphysema, therefore, frequently have an elevated carbon dioxide tension in the blood. At rest, the oxygen saturation stays in the normal range, except in very severe cases. During normal sleep, ventilation usually decreases, and even in healthy persons the carbon dioxide tension rises slightly. Patients with obstructive emphysema are no exception. While they are awake, however, the alveolar oxygen tension is already lower than normal, so that depression of ventilation during sleep may well result in inadequate oxygen saturation.[2] Since general anesthesia is usually also associated with mild respiratory depression, similar effects of hypoventilation must be anticipated during anesthesia. This condition is easily made worse by premedicating these patients with respiratory depressants, such as opiates, or by giving intravenous barbiturates, such as thiopental (Pentothal) or other ultra-short-acting hypnotics. Nevertheless, cyanosis is not ordinarily seen in emphysematous patients during anesthesia because high oxygen concentrations are so frequently administered with ether, cyclopropane, and halothane (Fluothane) anesthesia. Cyanosis, however, may quickly occur when the oxygen concentration cannot be kept artificially high, for instance with nitrous oxide or ethylene anesthesia.

A pink patient is not necessarily a well ventilated patient. Carbon dioxide tensions can rise even when oxygen is abundant, and the anesthetized emphysematous patient may gradually slide into severe respiratory acidosis despite excellent oxygenation. The management of an emphysematous patient here presents the anesthetist with a formidable array of dilemmas. A high oxygen tension may arrest ventilatory efforts if the patient

had been relying on respiratory stimuli created by hypoxia. Patients with this severe disturbance are rarely candidates for surgery. In general, high oxygen tensions during operation in emphysematous patients are definitely indicated. A rising carbon dioxide tension, on the other hand, may at first lead to frantic respiratory efforts, jerking contractions of the diaphragm, which during abdominal or thoracic procedures are especially annoying to the surgeon, and to a tracheal tug. The wrong therapy here, such as deepening anesthesia or injecting a muscle relaxant, may kill the patient. In mildly emphysematous patients, all that usually happens with light respiratory acidosis is some hypertension during operation followed by moderate to profound hypotension early postoperatively.

These considerations lead to the conclusion that even without muscle relaxants, heavy preanesthetic medication, too deep anesthesia, or an unwise choice of anesthetic agents can result in anesthetic or postoperative complications. It is obvious that the anesthetic with the least respiratory depression is best. This is ether. It has the further advantage of dilating bronchi and of providing good abdominal relaxation. Halothane also dilates bronchi and relaxes muscles, but it depresses ventilation markedly and causes hypotension. In light ether anesthesia, ventilation may actually be stimulated. Of course, the operating conditions will not be ideal for the surgeon, since in severe obstructive emphysema some expiratory muscle action must be preserved.

Disturbed Circulation

In severe cases of obstructive emphysema, there is an abnormal resistance to blood flow through the pulmonary vascular bed, which may lead to right heart dilatation. Polycythemia developing in response to poor oxygenation causes increased blood viscosity. Active expiratory efforts may contribute their detrimental effect to the circulation of blood in the chest. If the anesthetist adds to this concert of physiologic injury, poorly timed and ineptly executed compressions of the anesthetic breathing bag, the patient's cardiac output may precipitously fall to intolerable levels, and shock and cardiac arrest may follow. Anyone who has had the opportunity to follow a continuous recording of arterial and venous blood pressures in anesthetized patients will testify that ineptly assisted or controlled ventilation can produce marked depression of arterial blood pressure and elevation of venous pressure. Gentle and carefully synchronized assistance of the patient's spontaneous ventilation is valuable and desirable and will assist in maintaining physiologic carbon dioxide levels in the alveoli. Out-of-phase assistance may upset the precarious cardiorespiratory balance of a severely emphysematous patient.

Impaired Ability to Handle Secretions

Emphysematous patients with a prolonged expiratory phase cannot cough effectively. During operation secretions can be aspirated with relative ease with a catheter passed through an endotracheal tube. Postoperatively, aspiration is more difficult, and it is necessary to consider a tracheostomy merely for this indication. If such difficulties are anticipated in severe cases, it is best to establish a tracheostomy some days prior to surgery so that the patient can accustom himself to the tracheostomy and the changes in gas tensions associated with it. A tracheostomy is mandatory in all emphysematous patients in whom ventilation postoperatively may be embarrassed secondary to the surgical procedure, such as thoracotomies or upper abdominal procedures. One should think of the tracheostomy early in the surgical management of these patients, and should not reserve this procedure for an emergency, since there is a certain mortality with tracheostomies performed as an emergency procedure on patients in severe respiratory distress.[3]

Choice of Anesthesia

My associates and I prefer to omit all preanesthetic medication, particularly opiates. In very apprehensive patients, an intramuscular barbiturate such as 100 mg./70 Kg. body weight of pentobarbital an hour prior to induction of anesthesia is useful. Since most emphysematous patients are in the older age group, we avoid scopolamine, which even in small dosages may lead to confusion and excitement in the elderly patient. Atropine 0.6 mg./70 Kg. subcutaneously one hour preoperatively is useful in reducing secretions during induction. When tenacious secretions exist, atropine may safely be omitted from the premedication, since it can conveniently be given intravenously if the need should arise during the anesthesia.

We consider ether as the agent of choice in the emphysematous patient. Ether is condemned by some because of its tendency to produce secretions. Bunker and his co-workers,[4] however, have shown that the incidence of postoperative respira-

tory complications in general is lower after ether anesthesia than following the use of muscle relaxants. The reason is presumably that even in the nonemphysematous patient, muscle relaxants cause a muscle weakness which includes the respiratory muscles and which lasts much longer than the anesthetic itself. The patients are frequently left in the recovery room with what appears to be an adequate ventilation. When minor secretions accumulate in the bronchi, however, the patient is not strong enough to expel them. If this is true for patients without pulmonary disease, it is certainly true for those with decreased lung elasticity and bronchial obstruction. Indeed, we are impressed with the frequency with which patients without clinical symptoms of respiratory insufficiency due to mild emphysema preoperatively become symptomatic, experiencing dyspnea, tracheal tug, and cyanosis, immediately following anesthesia with muscle relaxants.

Ether tends to cause liquid secretions which are easily coughed up soon after the operation, since impairment of muscle function does not exist postoperatively following this inhalation anesthetic. In the emphysematous patient, we prefer ether over halothane anesthesia, because ether stimulates ventilation, whereas halothane depresses it, and ether is not associated with as much cardiovascular depression as is halothane. Cyclopropane and thiopental sometimes cause bronchial constriction, and we, therefore, do not select them in patients with obstructive emphysema. Spinal anesthesia is useful for procedures involving the perineum or the lower extremities. When the abdomen is involved, spinal anesthesia may result in respiratory difficulties by profoundly relaxing the abdominal muscles which the patient requires for active expiration.

In elective cases, much effort should go into preparing these patients for operation. An existing bronchitis should be vigorously treated. Respiratory exercises, intermittent positive pressure breathing and bronchodilators all have their place in the preoperative and postoperative treatment. No measure can restore the patient's normal respiratory physiology, and the anesthetist will be prudent to carry out patiently a slow and difficult inhalation induction. It is possible to "get away" with the use of intravenous barbiturates, nitrous oxide, and a muscle relaxant in all but the severe cases. The margin of safety, however, during anesthesia with such agents is bound to be much narrower, and the incidence of postoperative complications which may be life-threatening is likely to be increased.

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Rhinosporidiosis

Report of a Case

H. Frederick Keiber, M.D.
WINTER HAVEN

Rhinosporidiosis is a chronic granulomatous infection caused by the fungus Rhinosporidium seeberi and involving most frequently the mucous membrane of the nose and nasopharynx. Other sites for invasion are the ocular tissues, oral pharynx, larynx, lip, rectum, genitourinary tract, skin, and rarely the abdominal viscera or lungs. Although this organism has been recognized since 1892, there is no definite knowledge concerning its method of infection or spread. Many unsuccessful attempts have been made to grow it on artificial culture media. The disease is considered endemic in India and Ceylon, but occurs sporadically in South America, the Philippines, Malay Straits, Persia, Italy, England, Scotland, Mexico, Cuba, South Africa, Egypt, Turkey, Poland, Japan and the United States. Inasmuch as it might be considered a rarity in Florida, I am reporting a case of rhinosporidiosis of the nasal mucosa for the differential diagnosis of a granulomatous growth.

Report of Case

A 12 year old white boy was referred on July 18, 1961, for treatment of a nasal tumor, noted for only one week, yet sufficiently large to obstruct the right nasal fossa. Even after diagnosis, the past history was noncontributory except for "free bleeding." The boy had spent all of his life in and around Central Florida.

The patient appeared to be a healthy active youth, with some apprehension as to how I would remove the growth. The mass was approximately 1.25 to 1.50 cm. in diameter, somewhat friable and purplish red in color. It bled readily when touched and was attached to the wall of the septum just posterior to Little's area. The remainder of the examination was essentially negative as related to the present illness.

Considering the growth to be a papilloma, I proceeded to remove it surgically under local anesthesia. Excision was followed by electrocauterization of the base to aid in controlling the bleeding. The specimen was submitted to the pathologist at Winter Haven Hospital, David J. Cox Jr., M.D., to whom must be given the entire credit for recognizing this unusual organism in Florida.

Discussion

Interest in this disease moved me to investigate the available literature and summarize some of the information obtained. Malbran at Buenos Aires in 1892, O'Kinealy at Calcutta in 1894 and Seeber at Buenos Aires in 1896 were the earliest workers describing this organism. Seeber considered the parasite to be a sporozoon, but in 1923 Ashworth classified it as a fungus and called the organism Rhinosporidium seeberi. Its systemic position is classified as: division, Eumycetes; class, Phycomycetes; order, Chytridiales; family, Coccidioidaceae; genus, Rhinosporidium and species, Seeberi.

A classical description of the parasite's life cycle is as follows: The fungus appears as a round or oval cell measuring 7 to 9 microns in diameter, containing clear vacuolated protoplasm and enclosed in a well defined chitinous membrane. It is generally found free in the connective tissue spaces, but occasionally may be intracellular. With growth, granules appear in the cytoplasm until it reaches a diameter of 50 to 60 microns. Then mitosis takes place. Four chromosomes are derived from the chromatin of the nucleus, and this division is followed by rapid but orderly multiplication to 8, 16, 32, 64, 128, et cetera, until 4,000 nuclei are present within the growing sporangium. During early mitosis a thick layer of cellulose is deposited on the inner surface of the chitinous envelope with the exception of one spot which becomes a spore. Eventually, along with division of the cytoplasm, some 16,000 young spores are formed in the sporangium. The young spore has a chitinous envelope, a vesicular nucleus with a karyosome and cytoplasm having vacuoles containing 10 to 16 refringent spherules of reserved food matter. The spores are then discharged through the spore of the sporangium and scattered through the connective tissue. When the refringent spherules of food matter are used up, the spores enter into further connective tissue cells to repeat the cycle. The ripe sporangia are white in color, measure 250 to 300 microns in diameter and can be seen by the naked eye.

An early lesion on a mucous membrane appears as a red to purplish granuloma extending above the surface. With growth it tends to be pedunculated. It is very vascular and bleeds easily on touch. Destruction of surrounding tissue may occur at later stages.

Symptoms of the disease depend somewhat on the duration and the site. If the lesion is in

the nose, the patient will experience the sensation of a foreign body, sneezing, coryza, itching and epistaxis. Involvement of the eyes increases lacrimation and produces tenderness, ocular pain and photophobia. Laryngeal lesions produce dysphonia while those in tracheal sites result in wheezing, dyspnea and some blood-stained mucus. Penile lesions may act like venereal warts, while vaginal or rectal lesions resemble polyps, hemorrhoids or condyloma. When the lesions are found on the skin, the patient will complain of itching and resultant secondary infection. They become painful and tender to touch, freely bleed and readily ulcerate.

The duration varies up to 30 years. All ages have been reported, and the infection occurs more frequently in the male sex. Veterinarian pathologists report that the disease is also seen on the nasal mucosa of horses and dogs.

The diagnosis, other than in endemic areas, will generally be made by the pathologist, who should recognize a characteristic picture of an acute or chronic inflammatory reaction with proliferation of blood vessels and the presence of numerous spherical sporangia measuring some 300 microns in diameter. The granules in the endospores stain intensely.

Treatment generally consists of removal by surgery, followed by electric cauterization. Incomplete removal readily results in recurrences. The disease is rarely fatal unless generalized dissemination occurs. Many medical forms of treatment, including antibiotics, have been discarded except for Neostibosan which has shown some success. Radium implantation, deep x-ray and ionization are of no help. Recurrent cases are the most difficult problems.

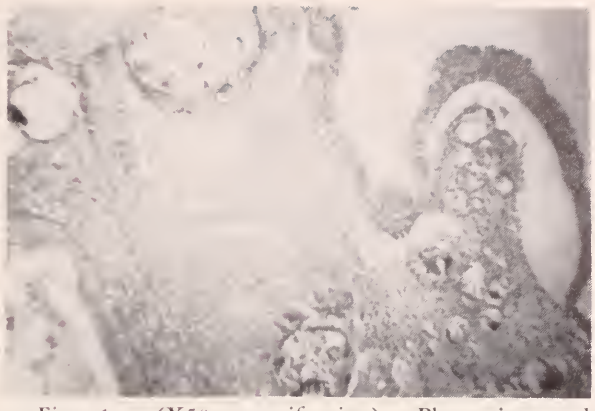


Fig. 1. — (X50 magnification). Photomicrograph showing multiple sporangia with metaplastic epithelium; chronic inflammation.

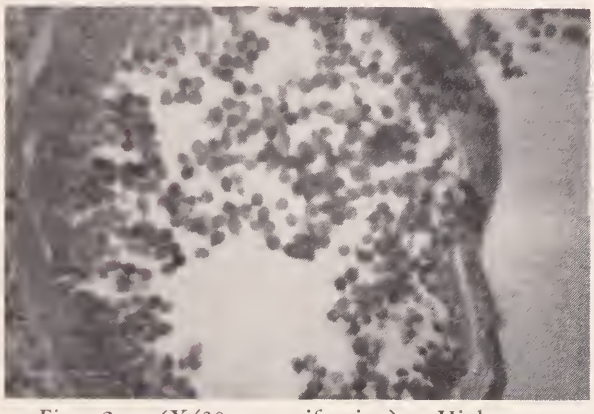


Fig. 2. — (X430 magnification). Higher power photomicrograph of sporangia in varying stages of development.

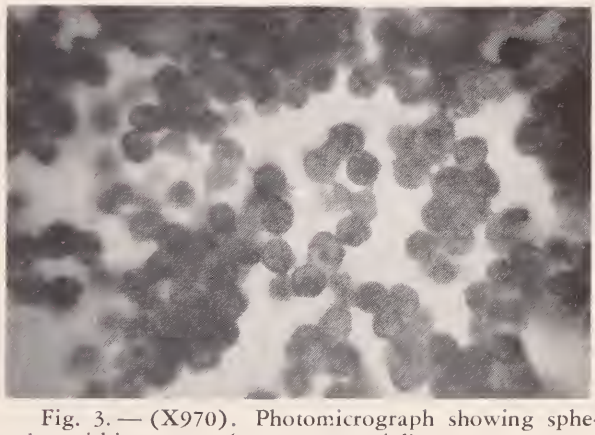


Fig. 3. — (X970). Photomicrograph showing spherules within spores (storage material).

Summary

A case of rhinosporidiosis occurring in Central Florida is reported, and a review of the disease is presented.

The slides and photomicrographs were prepared by David J. Cox, M.D., pathologist at Winter Haven Hospital.

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Coker Building.

Survey of and Recommendations for Psychiatric Inpatient Units in General Hospitals in Florida

William C. Ruffin Jr., M.D.
GAINESVILLE

Mental illness is the most extensive single health problem facing the world today. Florida's mental health program is complicated because of a rapidly increasing population, wide geographic area, and scarcity of trained personnel in the field of mental health. The situation has reached crisis proportions in the state and demands immediate attention. In order to meet the crisis in a fashion suitable for Florida, a study committee* sponsored by the Florida State Board of Health, the National Institute of Mental Health, the University of Florida College of Medicine, the Florida Division of Mental Health, and the Florida Psychiatric Society was established to study the existing 14 general hospitals with psychiatric inpatient units. Expansion of general hospital psychiatric inpatient units has been proposed as a partial solution to the state's rapidly increasing admission rate to the state hospital system by treating illnesses early and preventing chronicity. This Committee's task was to conduct a comprehensive survey and make recommendations regarding the future development of general hospital psychiatry in Florida.

Method

First hand information about the units was lacking, and it was thought too costly and time-consuming to make site visits. The Committee members, who represented many disciplines, composed an extensive and complete questionnaire covering location of the units, beds available, admissions, discharges, treatment offered, charges, facilities, and personnel.

The questionnaire was hand-delivered to the hospital administrator in each of the 14 hospitals with psychiatric inpatient units by a member of the Committee, or a person asked to represent the Committee. The representative was available for clarification or questions which the hospital administrator or members of the professional staff might have.

All 14 hospitals returned the completed forms. The Committee then analyzed the data, and the results are summarized:

Data

The geographical makeup of Florida and the striking contrasting sociological picture have made coordinated and cooperative community efforts difficult. Florida stretches from the Gulf Coast of Alabama to the southernmost city in the United States, Key West, a distance of more than 800 miles. In this large and complex situation, there are 14 general hospitals with existing psychiatric inpatient units. These are grouped in the more densely populated areas and cannot provide psychiatric coverage in a large portion of the state (see diagram).



*STUDY COMMITTEE: John T. Benbow, M.D., Northeast Florida State Hospital, Macclenny; Lindsey D. Campbell, M.D., Duval Mental Health Clinic, Jacksonville; Annie Laurie Crawford, R.N., M.Ed., Florida State Board of Health, Jacksonville; Henry L. Dean, M.D., Department of Psychiatry, University of Miami School of Medicine, Miami; Robert T. Landsdale, Ph.D., School of Social Welfare, Florida State University, Tallahassee; George Landsman, M.S.W., Department of Health, Education, and Welfare, Washington, D. C.; Kent S. Miller, Ph.D., Leon County Health Department, Tallahassee; Melvin P. Reid, Ph.D., Florida State Board of Health, Jacksonville; William D. Rogers, M.D., Florida Division of Mental Health, Chattahoochee; William C. Ruffin Jr., M.D., Department of Psychiatry, University of Florida College of Medicine, Gainesville; Michael J. Wood, Administrator, Duval Medical Center, Jacksonville; O. Wayne Yeager, M.D., Florida State Board of Health, Jacksonville.

Beds Available: The general hospitals shown in the diagram have a total of 299 psychiatric beds with an average of 7 per cent of the total beds reserved for psychiatric patients. The range is from 0.06 per cent to 17.7 per cent.

Admissions and Discharges: In 1959, there were 5,665 psychiatric patients admitted to these units. This was more than one half of the total number of new admissions to all of the state hospitals in Florida during the same period. The average length of stay varied from 9.5 to 30 days. Of these patients, 4,079 were discharged improved and returned to full employment or home. Most of the remaining 1,586 patients were transferred to a state hospital, or in some instances have remained as chronic patients in the general hospitals.

Treatment Offered:

Chemotherapy and electroconvulsive treatment are used in all of the hospitals. Carbon dioxide is used as a means of treatment in seven units. Psychosurgery was performed in three hospitals during the reported 12 month period. Insulin coma treatment was given in five hospitals. Individual psychotherapy is the treatment of choice in 13 units. Group therapy as well as individual therapy is offered in four units.

Charges:

The reported hospital charges ranged from $10 per day to $39 per day.

Facilities:

The physical facilities of 10 units consist of "open" and "closed" doors. Two hospitals have locked units and do not have open door arrangements. Seclusion rooms are used in 10 of the hospitals. Two of the reporting hospitals adhere strictly to the "open door policy" and have no locked doors.

Personnel:

1. Physicians.—All reporting units operate with an "open staff." Practicing psychiatrists treat the majority of the patients; however, they also serve as consultants to the nonpsychiatric physicians.

2. Nurses.—All of the psychiatric units have professional nurses with the majority providing 24 hour supervision. While many nurses have had previous clinical experience, only one hospital has nurses with graduate training in psychiatric nursing. The majority report orientation in inservice training programs, as well as encourage participation in workshops, institutes, and seminars.

3. Social Workers.—The social worker is noticeably lacking. Only four hospitals have a professionally trained social worker. One hospital has a partially trained worker, and three have workers who have a Bachelor's degree. One hospital uses a volunteer to help with social work.

4. Health Related Personnel.—Six hospitals reported having trained occupational therapists, and three have untrained therapists. Ten hospitals have the services of physical therapists. Four have the services of a full time psychologist, and six have a psychologist available as a consultant. Four of the hospitals do not have psychological service.

Discussion

In drawing conclusions from the survey, striking and challenging facts are recognized. Florida has had a 70 per cent increase in population over the last 10 years; there are almost five million people in the state. There has been an increase in the number of patients admitted to our state hospitals. From 1955 to 1960, 18,600 patients were admitted, almost double the number admitted for the period 1950 to 1955. In the next five years, unless preventive measures are taken, one can expect approximately 35,000 people to be admitted to the state hospitals.

It is astounding to find that these 14 general hospitals with 299 beds for psychiatric patients admitted more than half the total number of new patients (5,665) admitted to all the state hopitals in Florida during the same 12 month period.

These hospitals with relatively few psychiatric beds are treating a proportionally large number of patients, returning them home quickly, and preventing chronicity. They are mostly self-supporting and contributing to the decrease of man-hours lost from work due to mental illness in their community. These 14 communities have taken positive and tangible action to offer treatment to the most serious health problem that the nation faces today.

In the remaining communities there is generalized enthusiasm and willingness to open more local units; several have been constructed since this survey, but have not opened because of the shortage of trained personnel. The problem centers around the fact that there are fewer than 150 psychiatrists in the state. The majority of these practice in state hospitals or in one of the three metropolitan centers. With these few psychiatrists

and a relative scarcity of general physicians, Florida faces a severe crisis as the population explosion continues unless positive action is taken.

Recommendations

In order to meet these problems facing Florida today, the most immediate recommendations are: (1) Increase the number of psychiatric inpatient units in general hospitals. (2) Promote and develop units in rural communities. (3) Provide comparable care in rural and metropolitan areas.

The stumbling block consists of two elements: (1) The few psychiatrists and their tendency to group in the more densely populated areas in the state. (2) The heavy case loads of the nonpsychiatric physicians who were not taught psychiatric principles as part of their formal medical training. Manpower, therefore, is the constituent most lacking. The majority of the psychiatric illnesses do not require the services of a psychiatrist, but can be treated by nonpsychiatric physicians with training in psychological principles.

The Florida Academy of General Practice has risen to this challenge and further is developing with the Florida Psychiatric Society, the Florida Medical Association, the Florida State Board of Health, and the University of Florida College of Medicine a postgraduate program for nonpsychiatric physicians in Florida.

Education is the keystone to expansion of general hospital psychiatry in this state. This is a must, and the Committee recommends increasing availability of postgraduate training for nonpsychiatric physicians as the initial step to be taken. Continued physical expansion of units should wait until well trained manpower is available to operate the general hospital units. A source of manpower is available in the general physicians. They are already treating these patients and are doing an excellent job; however, with training in diagnostic methods and advanced psychiatric techniques the nonpsychiatric physician can bring much of modern day psychiatry to his home community.

Summary

A comprehensive survey of 14 general hospitals with psychiatric inpatient units in Florida was conducted by a study committee.

The survey clearly pointed out how effective a relatively small number of general hospital psychiatric beds are in treating emotional illnesses in Florida.

The Committee has recommended expansion of the general hospital units as a means of meeting the increasing mental health problems in Florida, but recognizes the need for increasing the availability of postgraduate training for nonpsychiatric physicians as an initial step.

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Research Progress at Tulane University School of Medicine

As in the past, the program of research covers a wide scope. It is designed specifically to aid the advance of the practice of medicine; numerous publications in authoritative medical journals have been written by members of the Department of Medicine. The following summarizes the most important studies currently underway:

Cardiovascular Laboratories

Significance of Tissue Chromaffin Cells and Mast Cells in Man.—Tissue mast cells have been a source of great curiosity since their conclusive description by Ehrlich over 80 years ago. They have been implicated in a vast majority of connective tissue reactions both of physiologic and pathologic nature. In some species at least, mast cells have been implicated in the production, storage and release of potent cardiovascular substances including heparin, serotonin and histamine.

The present report is directed particularly toward man. Evidence is presented suggesting that human tissue cells, previously lumped into one large group on the basis of granular metachromasia and termed tissue mast cells, represent at least two morphologically distinct cellular types. Difference in function of these cells may be great. There is evidence that one type may be a local tissue source for epinephrine, norepinephrine, or both. It is suggested that mast cells as a whole may represent a spectrum of cell types having numerous differences in ultrastructure and function. It is believed that their continued study in various physiologic and pathologic states should prove fruitful.

Rheoplethysmographic Studies of Digital Venous Tone and Venous Activity.—It has been shown that partial obstruction to digital venous outflow resulted in slight increase in tone and constriction of the precapillary digital vessels and from slight to marked increase in postcapillary vascular tone and constriction. The digital veins were among the postcapillary vessels. The mechanism for the increase in venomotor tone as well as the tone of the other vessels remains unknown.

Four types of volume-time course curves for the initial pulse cycles after inflation of the digital collecting cuff were described. These included the patterns for (1) the resting, relaxed state of the digital vessels, (2) the dilated state, (3) the constricted state (types A and B), and (4) the obstruction to digital flow. These curves have significant rheoplethysmographic, physiologic and pathologic connotations.

Noradrenalin was found to constrict the postcapillary digital vessels, including the veins, but the veins were not constricted as much as the precapillary vessels for the doses used.

The orienting reflex, psychogenic and neurogenic reflexes, and deep inspiration were found to produce constriction of the postcapillary vessels, including the digital veins, as well as the precapillary vessels.

It was found rheoplethysmographically that the precapillary and postcapillary vessels constrict and/or dilate discordantly or disproportionately in the same manner described for the afferent and efferent arterioles of the kidney. This phenomenon probably exists for other organs as well. The phenomenon is most likely concerned with the regulation of water and solute loss into, and absorption from the intercellular spaces, and with interstitial fluid circulation and lymph flow in healthy and disease states.

The value of digital rheoplethysmography in the study of the peripheral circulation was further emphasized by these observations.

This report was received on June 14, 1962.

THE ELECTROCARDIOGRAM AND VENTRICULAR GRADIENT IN ISOLATED CONGENITAL PULMONARY STENOSIS.—The electrocardiogram and ventricular gradient were studied in 41 patients with isolated congenital pulmonary stenosis. The ventricular gradient was abnormal in 26 of the 41 patients (63 per cent). The ÂQRS migrated to the right in the frontal plane and ÂT migrated to the left. Following surgical reduction of the stenosis these vectors rotated rapidly toward the normal position.

The electrocardiographic pattern in isolated congenital pulmonary stenosis tended to be of four types that were generally related to the right ventricular systolic pressure. The electrocardiographic changes associated with this defect, in which the work of the right ventricle was increased because of right ventricular hypertension, were different from those associated with atrial septal defect in which right ventricular work was increased because of high volume output. The duration of the QRS complex was not prolonged in the electrocardiograms of patients with pulmonary stenosis, whereas it was characteristically prolonged in those with atrial septal defect.

A STUDY OF THE VENTRICULAR GRADIENT IN NORMAL INFANTS AND CHILDREN.—The electrocardiograms of 172 infants and children without heart disease and ranging in age from a few hours to 16 years were analyzed for ÂQRS, ÂT and G in the frontal plane projection.

The mean ÂQRS and G were of less magnitude during the first three years of life than in adults. During the first year of life ÂQRS was directed more to the right than in adults.

Except for five subjects, the angles between G and ÂQRS, and G and ÂT were less than 30 degrees.

It is concluded that the mean ÂQRS, ÂT and G for children are very similar to those for adults except for the differences noted before the third year of life, and that the standards that already exist in the literature for adults are applicable to children.

THE EFFECTS OF ACETYL-STROPHANTHIDIN ON THE KINETICS OF POTASSIUM AND Rb^{86} IN THE MYOCARDIUM OF DOGS.—The kinetics of potassium in the dog myocardium were studied immediately following the administration of acetyl-strophanthidin, utilizing a Rb^{86}-tracer technique.

The immediate loss of potassium from the myocardium following administration of acetyl-strophanthidin averaged 0.25 mEq. per kilogram of left ventricle per minute.

The amount of tracer extracted from the blood by the myocardium declined immediately after the administration of acetyl-strophanthidin, indicating a reduction in the amount of potassium entering the myocardium from the plasma. There was probably a smaller reduction in the amount of potassium leaving the myocardium and entering the plasma, since the estimated decrease in the uptake of potassium was almost twice as much as the net loss of myocardial potassium. Calculations indicate that the decrease in the extraction of Rb^{86} by the myocardium after acetyl-strophanthidin could be explained by a fall of 42 per cent in the flux of potassium across the myocardial capillary or by a doubling of the amount of plasma functionally shunted past myocardial capillaries.

INFLUENCE OF THE CENTRAL NERVOUS SYSTEM ON VEINS IN MAN.—A simple method for the study of an intact venous segment in intact man has been described. This method is suitable for the study of aspects of the role of the veins in the regulation of the circulation in health and disease.

The influence of the central nervous system upon the superficial veins of man has been indicated. Psychogenic factors such as thinking, emotional disturbances, interest, apprehension and concern were shown to increase tone of the superficial vein of the forearm. Fear of the procedure produced syncope with a marked decline in venous pressure in two subjects who sat in a chair during the study. No syncopal disturbance was encountered when the studies were conducted with the subjects recumbent.

Neurogenic stimuli such as pain, cold and discomfort produced by heat resulted in an increase in segmental venous tone. Every factor tested which influenced the tone of the arterial system had the same effect on the venous system. This applied to hexamethonium and noradrenalin as well. The response to the hepatojugular reflux test was found to be partially mediated through the sympathetic nervous system.

THE ARTERIOVENOUS ANASTOMOSES AND BLOOD VESSELS OF THE HUMAN FINGER.—A review of the literature concerning the structure and function of digital arteriovenous anastomoses, glomus organs and homologous structures has revealed basic differences of concepts which require clarification. The functional concept of the

arteriovenous anastomosis has always been one in which blood flow was regulated through mechanical action of the specialized smooth muscle composing the tunica media of these specialized blood vessels. Although this has been observed in vivo in experimental animals, their arteriovenous anastomoses do not display the complex structural modifications which characterize these structures in man.

Methods have been described by which the fine structure of the human digital arteriovenous anastomosis can be re-evaluated regarding the nature of structural and functional specialization. With the use of these methods a small series of infant and adult anastomoses was studied. The results of these observations indicated that there exists in the human finger a series of modified blood vessels which vary in architectural complexity. These form a group of homologous structures which, through developmental modification, may acquire the degrees of differentiation characteristic of true organs.

The morphogenesis of these organ structures is similar to the nonpheochromic paraganglia, and they are structurally identical with the coccygeal glomeruli. Three dimensional study of the finer vascular relationships of the digital glomus organs suggests that developmentally they arise by one or more of several morphogenetic processes. These include divisions of a single lumen, fusion of adjacent anastomotic segments and their development from terminal arteries. Certain of the digital glomeruli observed contain multiple anastomotic channels of small size and others are in such a relationship to venules that their function as arteriovenous shunts is questioned. These observations strongly emphasize the need for additional anatomical investigation which may clarify the suggested secretory function for these glomus organs.

Evidence is presented which suggests interrelations between neurogenic factors and the development of complex glomus organs. In view of the marked basic cytological similarity of paraganglion and vascular epithelioid cells, the controversial questions regarding homology must be re-evaluated.

Specific progressive involutional changes were found to be associated with the process of aging. These have been briefly described. Additional study, however, is necessary in this area.

The digital glomus organs of more advanced structure are confined to the nail-bed and volar areas. In the nail bed they occupy spaces in the vascular compartments where they typically drain into venous channels of the intermediate plexus. In addition to these, especially large complex glomus organs are found related to the periosteal arteries. Digital glomus organs in the volar skin are associated with perforating arteries supplying the skin and adjacent sweat glands. These are usually situated in the lower layers of the stratum reticulare where they drain into veins of the intermediate dermal venous plexus or their anastomotic connections to deep veins. There is evidence suggesting a finite relationship of numbers of volar dermal glomera to the arteries supplying the subpapillary rete.

The principal observations summarized indicate that the digital glomus organ and its morphogenetic antecedents are in reality different degrees of developmental specialization, the direction of which is toward establishment of peripheral neurovascular humoral end organs. This specialization is thought to be superimposed upon a primitive and basic functional characteristic which gradually comes to be of secondary importance as differentiation progresses.

By means of rheoplethysmography (RPG) it is becoming possible to observe the behavior of various components of the digital vascular system described. The volume and rate curves of digital inflow reflect the state and behavior of the arteries and arterioles whereas the outflow curves reflect the state and behavior of the veins and postcapillary vessels. By means of integration of the entire RPG including the alpha, beta and gamma deflections, it is possible to observe changes of the precapillary and postcapillary vessels. These vessels appear to function in a manner similar to that described for the afferent and efferent arterioles of the glomeruli of the kidney. The RPG also reflects the state and variations in functions of the arteriovenous anastomoses. Psychogenic and neurogenic stimuli, drugs, environmental temperatures and many other factors influence these digital vessels. These studies emphasize the complexities of the digital circulation.

THE SPATIAL VECTORCARDIOGRAM IN LEFT BUNDLE BRANCH BLOCK AND MYOCARDIAL INFARCTION, WITH AUTOPSY STUDIES.—The spatial vectorcardiograms of 15 patients with left bundle branch block complicated by myocardial infarction located at autopsy are presented. Distortions in the QRS sÊ-loops not usually found in patients with left bundle branch block without myo-

cardial infarction are described. A theoretic basis for the distortions in the QRS sÊ-loop due to myocardial infarction was suggested. Continued correlation of the spatial vectorcardiogram in left bundle branch block with autopsy studies should increase the usefulness of this type of tracing in the resolution of an extremely difficult problem, namely, the detection of myocardial infarction in the presence of left bundle branch block.

Venomotor Reactions in the Forearm Veins of Man.—Thirty-five subjects, 11 with and 24 without congestive heart failure, were studied with the isolated venous segment technique. A separate peripheral vein to the systemic circulation was studied concurrently.

The effects on venous tone of stroking the overlying skin, hexamethonium, noradrenalin, local procaine field block, stellate ganglion block, digitalis, deep inspiration and Valsalva maneuvers were studied and described.

The venomotor responses to neurogenic and psychogenic stimuli were studied, and marked increases in venomotor were found.

It is suggested that hexamethonium and other sympathetic ganglion blocking agents may be useful adjuncts in the treatment of congestive heart failure when venous tone is elevated.

It is suggested that the mechanisms regulating venous tone probably play an important part in cardiovascular adjustments in health and disease.

The phenomenon of local venospasm is described.

There is a need for additional studies of the mechanisms regulating venomotor tone.

Cardiac Insufficiency in Chronic Alcoholism.—The frequent coexistence of malnutrition and heart disease with an obscure cause is a worldwide phenomenon. In only a few instances has a causal relationship between these entities been accepted, for example, kwashiorkor and beriberi. Nevertheless, circumstances suggest similar instances which demand further study.

Consideration must also be given to the possibility that alcohol per se may have a direct toxic effect on the heart.

To illustrate these problems further, eight cases are reviewed. The clinical picture and course exhibited by the patients ranged from those of classic beriberi heart disease to those of typical nonspecific heart failure. In every instance alcoholism was a prominent feature of the clinical syndrome.

Features of Palmar Dermatoglyphics in Congenital Heart Disease.—One hundred fifty-seven pairs of palm prints from patients with congenital heart disease were compared with 143 pairs of palm prints from patients with acquired heart disease. It was noted that a proximal position of the palmar axial triradius (t or t' location) occurred with significantly greater frequency in the patients with acquired heart disease, or conversely, that a more distal location of the axial palmar triradius was significantly more frequent in the group with congenital cardiac disease. The differences for the Negro patients occurred with a p value of 0.0164, the p value being less than 0.0000634 for white patients.

The Digital Rheoplethysmogram During Asian Influenza.—Rheoplethysmography of 20 patients with Asian influenza revealed peripheral vasoconstriction and reduced digital flow at the height of illness in 15 patients. The configuration of the volume and rate curves was essentially normal as were the responses to deep inspiration and the sound of a bell, although of reduced magnitude in the presence of constricted vessels. Four patients exhibited no change in digital flow with illness, whereas one evidenced definite increased flow. Accentuation of the dicrotic notch of the D_V curves was noted in approximately half of the patients and tended to disappear with recovery. This phenomenon occurred regardless of the state of vascular tone, and was associated with exaggeration of inflow acceleration early in systole.

Of the five patients who did not experience vasoconstriction, four showed no alteration in digital blood flow at any stage of observation. The fifth patient showed increased digital blood flow at the height of illness, with subsequent return to normal with recovery. It was interesting to note that this patient was the most seriously ill of the group and suffered from a complicating staphylococcic pneumonia. He was also the sole patient to exhibit hypotension, which was most marked at the height of illness.

Electrocardiographic and Vectorcardiographic Detection of Heart Disease in the Presence of the Pre-excitation Syndrome (Wolff-Parkinson-White Syndrome).—The electrocardiogram, spatial vectorcardiogram, and ventricular gradient were studied in 15 patients with pre-excitation (Wolff-Parkinson-White) syndrome to determine their usefulness in the recognition of myocardial disease in the presence

of this disturbance. It was found that the spatial vectorcardiogram and ventricular gradient could suggest the diagnosis of myocardial disease in patients with this syndrome. These studies further indicate the value of the spatial vectorcardiogram in clinical cardiology.

Clinical Estimation of the Volumes of Blood in the Right Heart, Left Heart, and Lungs by Use of I^{131} Albumin.—An external isotope method for estimating intracardiac and pulmonary blood volumes has been studied in 41 subjects with and without cardiac disease.

Intracardiac blood volume estimated from radioactivity of the cardiac area 10 minutes after intravenous injection of 100 μc. of I^{131} albumin averaged 345 ± 55 ml./M.^{2} in 16 subjects without heart disease.

In general, intracardiac blood volume was proportional to the size of the heart shadow, but there was slightly less blood in relation to the size of the heart in subjects with cardiac hypertrophy. In two persons with pericardial effusion the intracardiac blood volumes were approximately 500 ml. less than would have been expected from the size of the cardiac shadow, suggesting an area of diagnostic usefulness for this technique.

By dividing the curve of precordial radioactivity during the first circulation of the isotope into the right and left heart components, the portion of the intracardiac blood in each side of the heart and the pulmonary blood volume were estimated.

The right heart volume in subjects without heart disease was 170 ± 25 ml./M.^{2}, and the left heart volume was 185 ± 50 ml./M.^{2}.

In normal subjects, pulmonary blood volume was 490 ± 130 ml./M.^{2}. Similar results were obtained in subjects with mitral stenosis and with other forms of heart disease.

The isotope methods used in the present studies contain important technical defects. Accurate and reliable techniques will require further development of instrumentation and procedure.

Public Health Service Hospital Laboratories

Biochemistry.—1. "The effect of drugs on the steric fine structure of biological macromolecules with special reference to cardiotonic and carcinogenic compounds." The project presently centers on proteins. An in vitro model system has been worked out in which denaturation of crystallized proteins is being studied by turbidimetry. It was found that a certain type of hydrogen bond "breakers" (thioacetamide, thiourea, dioxane, dimethylnitrosamine, phenol and many others) produces intermolecular aggregation which proceeds via disulfide bridge formation following limited unfolding of the tertiary structure. This model system, concurrently with the optical rotatory method and viscosimetry, is used to study reversible and irreversible changes in macromolecular structure, produced by steroid aglycones of cardiac glycosides and various hydrocarbons and azo carcinogens.

2. "The effect of choloracetone on benzpyrene induced skin tumorigenesis." Among the many known inhibitors of hydrocarbon-induced skin carcinogenesis, a number of compounds are also inhibitors of glycolysis as studies in in vitro systems. Of these, choloracetone is of particular interest, being a bifunctional agent with functional groups (-Cl and C=O) of unequal reactivity. For this reason it is hoped that by studying the effect of graded concentrations of this agent on benzpyrene carcinogenesis, it may be determined whether or not the initial fixation of the hydrocarbon molecule to structural proteins in the cell proceeds via formation of clathrate type "inclusion" compounds.

Pharmacology.—During the period between July 1, 1960 and the present, work was started on the Dilated Heart Program. These investigations can be divided into several studies.

1. Studies were made of localized ventricular dilation following coronary artery occlusion. These studies were performed primarily in the laboratories of the Department of Medicine. Two medical students participated. Localized ventricular dilation was produced by ligation of the left anterior descending coronary artery. Length changes were obtained simultaneously with intraventricular pressure measurements. The changes occurring in the area of ischemia were compared with the measurements obtained from areas of ventricular muscle not affected by the vessels. The major conclusion reached as a result of these studies was that myocardial ischemia was capable of producing a significant relaxation of cardiac ventricular muscle. There was a definite loss of tone in the area of ischemia. Increments in intraventricular pressure caused a bulging in this area, resulting in dilation rather than contraction during systole.

2. Studies were carried out to determine relationships that exist between acid base balance and myocardial contractility. These studies included the effects of generalized metabolic acidosis

on sympathoadrenal stimulation and the resultant effects of the increase in catecholamines on myocardial contractility. Local adrenal acidosis was studied and a decrease in pH of the blood perfusing the adrenal gland was found to be a potent adrenal stimulant. The effects of catecholamines on myocardial contractility were shown to be reduced by myocardial acidosis and enhanced by alkalosis. Correction of the acidosis caused a decrease in the adrenal stimulation. Death due to metabolic acidosis was shown to result from myocardial failure. In the late stages of acidosis there was marked cardiac enlargement, and death occurred with cardiac standstill. The heart stopped in diastole, was large, and a marked absence of myocardial tone was present. These studies were reported at the New York Academy of Science Conference on Amine Buffers and will appear in the Annals of the New York Academy of Science during May.

3. The major aim of the research in progress is to increase our knowledge of the pharmacological effects of drugs used in the treatment of myocardial failure. As we learn more concerning the pathways of energy metabolism, causative factors in heart disease, and compensatory factors in heart disease, a concomitant increase in our pharmacological knowledge will prove a scientific basis for therapeutics. A cardiovascular pharmacodynamic laboratory designed for the simultaneous study of the effects of drugs on cardiac muscle excitability and activity (contraction and relaxation), hemodynamics and energy metabolism is being developed at the U. S. Public Health Service Hospital.

The studies of A. V. Hill, Fenn, Ramsey, Szent-Gyorgyi and others provided a thermodynamic link between isometric and isotonic muscle activity and energy metabolism. While the major portion of our knowledge is derived from skeletal muscle activity at present, studies are being conducted in this laboratory which should add to our knowledge of these relationships existing between cardiac muscle activity and energy metabolism. These studies will provide the basis for an investigation of the mechanism of action of cardiovascular drugs.

Radioisotope Unit.—Numerous in vitro and in vivo (animal) experiments involving various radioisotopes have been completed and are in progress. Isotopes studied included Mg^{28}, Cd^{115M}, Cd^{115}, Cr^{51} and I^{131}. These warrant further investigation. Methodology for the determination of erythrocyte mass and survival and plasma volume was perfected.

Clinical Medicine.—A total of approximately 25 patients with idiopathic myocardial degeneration have been studied and treated incident to the investigation. Our results have been excellent and warrant continuation of the project.

Several hundred charts from Charity Hospital and the Veterans Administration Hospital were reviewed, and those pertaining to myocarditis and myocardosis were abstracted.

Digital rheoplethysmographic studies of acromegalic patients were initiated.

All charts at Charity, Veterans Administration and Public Health Service hospitals were reviewed, and those pertaining to acromegalic patients were abstracted. This study is in conjunction with a project dealing with acromegalic heart disease.

Nutrition and Metabolism Laboratories

The following studies are currently underway:

Studies of the metabolism of vitamin B_{12} and intrinsic factor. This investigation includes basic studies of the role of vitamin B_{12} in metabolism, vitamin B_{12} intrinsic factor interrelationships, the transport and storage of vitamin B_{12} and clinical studies of patients with macrocytic anemia with particular attention being given to malabsorption syndromes.

Folic acid metabolism is being actively investigated in malabsorption syndromes and in patients with several types of macrocytic anemia. Preliminary studies are underway to determine human folic acid requirements.

Studies of amino acid and protein nutrition are concerned primarily with the role of amino acid imbalance in the pathogenesis of pellagra. Other studies deal with the supplementation of low protein diets with limiting amino acids and the development of methods for the evaluation of protein nutrition.

An investigation of relationships between protein nutrition and the susceptibility of the animal to parasitemia by Trypanosoma cruzi is being continued.

Basic studies of propanediol phosphate metabolism are being continued. The enzymatic oxidation and reduction of lactaldehyde is under investigation.

Extensive studies of lipid metabolism in man are underway. These investigations include the development of new methodology and an investi-

gation of mechanisms by which dietary fats, nicotinic acid and neomycin influence serum lipid levels. The role of the intestinal flora in sterol and bile acid metabolism is being investigated. Serum lipid patterns are being determined under various physiologic and pathologic conditions.

Glass fiber paper chromatographic method for measurement of plasma vasopressin and oxytocin has continued to develop during the current year under the supervision of Dr. Arimura. Dr. Max C. Staub has worked on glass fiber paper chromatography of adrenal steroids, and several publications have arisen as a result of this work. Studies in glass paper chromatographic method for insulin assay have been conducted by Dr. Lilia Maranan. Dr. Wiley Jenkins has been conducting clinical studies on the effects of oxytocin and aldosterone on sodium and water metabolism. Dr. de Rutter has conducted clinical evaluations of various thyroid hormone analogues as hypocholesterolemic agents and antigoitrogenic agents in humans. She has also supervised clinical investigations of a new oral hypoglycemic agent in the diabetes clinic.

Serum Lipids

Dr. Roy Turner has made substantial progress toward publication of extensive and complex data concerning relationship of serum lipids to susceptibility to atherosclerosis.

Hematology Laboratories

Participation is currently underway in the Southwest Cancer Chemotherapy Study Group wherein we are studying virtually all patients with malignant disease coming under our supervision. This work consists of comparative studies of more or less established modes of therapy as well as screening totally new agents for chemotherapeutic effectiveness in patients with terminal malignancy.

A study has been completed involving determination of protection afforded patients receiving chemotherapeutic agents by the administration of homologous or autologous bone marrow. We have continued in our attempt to demonstrate platelet antibodies by the fluorescent antibody technique. Miss Jeannette Pullen, one of our senior students, was an active participant in this study along with Dr. Charles L. Brown Jr. This technique proved very effective in demonstrating platelet antibodies when human platelets served as an antigen to stimulate an antihuman antibody in the recipient rabbit. When, however, the globulin of human patients suffering from idiopathic thrombocytopenic purpura was conjugated with the fluorescent dye and reacted with the patient's platelets or megakaryocytes, no significant fluorescence could be obtained. We are planning to utilize this technique in an effort to improve on the specificity of demonstrating the "lupus factor" in patients with disseminated lupus erythematosus.

Dr. W. J. Stuckey Jr., utilizing radioisotope techniques, has been conducting studies attempting to determine the degree to which bone marrow is permanently compromised by local x-ray therapy. Preliminary results suggest that permanent depression probably occurs more often than has previously been thought. In addition, Dr. Stuckey has been studying the effect of the addition of an emulsifying agent upon the absorption of oral iron and plans to present the result of this study at the annual meeting of the American Medical Association in New York on June 28. Dr. Ruth Sterling Hoffman has modified the hemoglobin electrophoresis technique so that we can now achieve essentially the same results on paper using a discontinuous buffer system that we formerly obtained to a much less satisfactory degree with starch block electrophoresis. This material should be ready for publication this summer. Dr. Thurman has investigated serum protein abnormalities in premature infants, bilirubin metabolism in newborn pups, effect of sickle cell crisis plasma on normal dogs and infants, effect of various antimetabolites on genetic templates in rats and rabbits, and continued study of tumor epidemiology in children.

Pulmonary Laboratories

During the past year the Tulane Pulmonary Research Laboratory has increased its activities and has added additional instruments of physiological investigation. It is now fully equipped for the measurement of lung volumes, rate of air flow, ventilatory mechanics, distribution of inspired gases and pulmonary gas exchange including diffusion. Research programs are varied and include studies on: (1) acute chest trauma and early postoperative pulmonary function, (2) the relation of the diffusing capacity to pulmonary blood flow during rest and exercise, and (3) the effect of nebulized steroid upon the course of bronchial asthma. During the past year a pulmonary physiological seminar has been established which meets once a week. At present the principal project involving analysis of clinical material is a long term study of pulmonary suppuration.

For the execution of this study an Abscess Conference is held once a week. This is attended by members of the Pulmonary Disease Unit of Tulane University and of the Chest and Medical Services of the New Orleans Veterans Administration Hospital.

Arthritis and Rheumatism Laboratories

The present phase of a study upon the behavior in culture of marrow from rheumatoid arthritis patients and from normal subjects has been completed and a paper submitted for publication. The long term observation of patients showing unexpected results in the latex test for rheumatoid arthritis is continuing and the assembling of results for a further assessment of the procedure is starting. Patients with rheumatoid arthritis being treated with gold now have regular estimations of the gold concentration in plasma and sometimes of their urinary excretion. It is hoped that some useful correlations with clinical benefit and perhaps with toxic manifestations may emerge. Dr. Herr made a pilot study of the relative value of the standard Congo Red test for amyloidosis and of a newly introduced procedure employing the dye Evans blue. Preliminary results indicate that the new test is much less reliable than the old. Dr. Herr is also cooperating in a study of the effects of antimalarials upon the eyes and is interested in assessing the value of chemical synovectomy by means of intra-articular nitrogen mustard.

Infectious Disease Laboratories

A new project encompassing various aspects of virus infection on the cardiovascular system of man has been initiated and will be conducted in collaboration with the cardiovascular laboratory of the Department of Medicine.

Our work on the study of the hemolytic toxin of the fire ant continued. The molecular weight has been determined to be in the vicinity of 650. There are no elements other than carbon, hydrogen, and nitrogen, and the only functional group identified is a tertiary amine. The presence of unsaturation is definitely indicated. Tests for the presence of an aromatic ring are negative. Elementary composition of the amine hydrochloride is: Carbon, 72.39 per cent; Hydrogen, 12.41; Nitrogen, 3.86; and Chloride, 11.50. A molecular formula tentatively postulated on the basis of this analysis is $(C_{20}H_{40}NCl)_X$. On the basis of our findings about the molecular weight of the compound, x is probably equal to 2. Potentiometric titrations of the amine in acetonitrile indicate that the amine nitrogen is of uniform basicity. The infrared studies of spectra of the amine in acetonitrile indicate the presence of long CH_2 chains, and the presence of unsaturation. In our fungus disease clinic we have been studying the question of immunity in ringworm infections. The observation that children usually do not have second bouts of tinea capitis would seem at first glance sufficient evidence for a concept of acquired immunity. Since, however, the opportunity for first infections often is not great, the failure to acquire a second infection might well be attributable to lack of opportunity rather than immunity. Of 718 children treated for tinea capitis at the Tulane Clinic during a three year period, not one returned with a second infection, despite entirely free medical care, including medication. At the time griseofulvin first became available a deliberate effort was made to set up studies to explore the possibility of immunity following infection. It seemed to us that treating one sibling and then leaving that child exposed to one or more untreated children would provide a long-awaited opportunity. This we did and are in the process of continuing. Thus far, 15 of the tinea capitis patients treated with griseofulvin have not become reinfected after known exposure. It is probable that this immunity rests either upon a specific and protective cellular alteration or an as yet undetected antibody. We hope to resolve this mechanism.

Gastroenterology Laboratories

Investigative studies in our relatively new Gastroenterology Laboratories include vitamin B_{12} metabolism in the malabsorption syndrome; bromsulphalein metabolism in dogs with canine hepatitis, surgical ligation of the biliary tract and drug-induced intrahepatic jaundice; the role of autoimmunity in certain gastrointestinal disorders; and a study of the effect of certain anabolic steroids on bromsulphalein metabolism.

President's Page

"But Have Not Love"

Last spring, upon reading my son's college application, I learned for the first time why he wanted to be a doctor. In essence, he stated that he wanted to study Medicine because it is an intellectual challenge and because it offers the opportunity to be of service to one's fellow man. It struck me as more than coincidental that he feels now just as I felt when I entered college 30 years ago. Despite the feeling of many doctors that Medicine has "changed," the same reasons, the same desires, the same attractions which have, since the beginning of time, motivated young men to study Medicine, still exist. Any doctor worthy of the name must be basically a student and he must have a full measure of compassion in his heart and love for his profession and for his patient. Not so long ago the practice of Medicine was almost all art. Because a doctor had little to offer but a compassionate heart, sympathy was the principal ingredient in his armamentarium, with the result that while he was highly regarded by his patients, the results of his treatment left much to be desired. More recently, in the human experimentation laboratories of Nazi Germany, the world was afforded a glimpse of what Medicine would be like if it were all Science and no heart. While love, or compassion, one of its many synonyms, is a difficult word to define, no better definition is to be found than that which appears in the Bible in the thirteenth chapter of the First Letter of Paul to the Corinthians: "If I speak in the tongues of men and of angels, but have not love, I am a noisy gong or a clanging cymbal. And if I have prophetic powers, and understand all mysteries and all knowledge, and if I have all faith, so as to remove mountains, but have not love, I am nothing. . . . Love is patient and kind; love is not jealous or boastful; it is not arrogant or rude. Love does not insist on its own way, it is not irritable or resentful; it does not rejoice at wrong, but rejoices in the right. . . ."

This is a beautiful description of a *personal* relationship. Indeed, it is difficult to imagine love in any other way but as a personal relationship. One of the greatest problems facing the medical profession at the present time is the preservation of this aspect of the practice of Medicine. If our sons are to have the opportunity of enjoying the great satisfaction of practicing Medicine as we have, we cannot permit our profession to become federalized, unionized, mechanized or in any other way impersonalized. Love begets love, compassion begets compassion, interest begets interest. In the long run, the best loved and most successful doctor is usually the one who gives the most of himself.

With the explosion of knowledge which we have witnessed in this century, the future of Medicine as a science is assured. Whether Medicine as an art survives depends on how much heart we put into its practice. As long as young men still can find in the practice of Medicine not only an intellectual challenge but a satisfying avenue for service to mankind, for the expression of compassion innately existing in the hearts of all good men, the future of the medical profession is secure.

Robert E. Gellner



The Spirit of Gratitude and the Physician

This is the month in which one day has been set aside as a reminder that every man should be grateful for the blessings of life. It seems strange that we should need a reminder to assume temporarily an attitude which should be a part of our daily lives; yet too few of us have the spirit of Thanksgiving until this special day appears on the calendar.

The expression of gratitude on the face of a child who has been given something he badly wants leaves a lasting impression. It is a normal reaction; yet in later years this child becomes the man who needs a reminder to be thankful. The passing of young manhood does not rob the physician of the spirit of gratefulness; neither do the years spent in school, college, internship and residency. The problems faced and solved during this period of life are not responsible; in fact, they should strengthen his gratitude.

Through these formative years, the student of medicine frequently fails to exercise the normal attitude of being grateful, and it begins to slip away from him. He is taught to doubt, to question, to depend upon the resources within himself and, ultimately, he realizes that few things are given freely. In this atmosphere, there is little gratitude, for when the full purchase price is paid, the result is taken for granted.

The young physician begins practice not knowing how to dispense gratitude. He has been taught to give his professional and scientific knowledge in so far as it can be applied to the alleviation of mental and physical illness. He may become a successful physician with a wide reputation among his patients as well as among his colleagues, but without gratitude he may not become the *good* physician who is remembered beyond the time when his technique has been superceded.

In the life of every physician, the time comes in the learning process when he should feel he is capable of incorporating into his life and practice the wisdom and knowledge which have come to him from studying his fellow man. When he takes advantage of this opportunity, adding to his professional skill this necessary attitude, he then is in the process of becoming the *good* physician. The attitudes and deeds he exhibits, for which he is not paid, determine the measure of the man, and when he comes to the realization that these must be given freely, the spirit of gratitude will thrive about him. Once this beginning has been made, he finds that whatever he gives returns to him in greater measure.

Realizing that each patient selected us as his physician, we who practice medicine should be grateful for this trust, and if our professional care is tempered with thoughtfulness, kindness, good will and concern, there does not have to be a reminder that Thanksgiving is a special day. The gratitude of the patient for this honest concern offers a reward equal to that which accrues from the application of our professional skills and knowledge. This reward will be ours if gratitude is a part of our practice.

T.M.

We Won the Battle Will We Win the War?

As you all know, the Senate killed, for this year, the King-Anderson legislation by a vote of 52 to 48. This is too close for comfort, and there were many extenuating circumstances that allowed us to win this important battle; if only two Senators had changed their minds, undoubtedly the Bill would have been passed in the Senate. It is of interest that Senator Randolph from West Virginia, who under ordinary circumstances would probably have been in favor of it, voted against the Bill. I am sure that our own Senator Smathers had tremendous pressure put upon him to vote

for the Bill, but he had the courage of his convictions and voted against it. If we are honest with ourselves and analyze it closely, this Bill was defeated because it was a very poor Bill, not because the majority of Senators are not in favor of some type of prepaid health care for those over 65.

I believe we all agree that we must do everything possible to implement the Kerr-Mills Bill in Florida and elsewhere; however, I believe the majority of the Congressmen and voters desire greater health benefits for the over 65 group.

We, as physicians, are frequently accused of not being progressive, and of not offering any constructive help. There is no question that the overwhelming majority of the people in this country want prepaid medical care. If we do not help in designing these plans, undoubtedly poor plans will become laws with which we will all have to live. If we honestly want to help in working out a scheme of prepaid voluntary care for people over the age of 65, we should develop a workable program at the very latest by January 1, 1963. There is no reason why we physicians in Florida should not be leaders in this field, since we have over one-half million people aged 65 or over.

There are two alternatives that I believe we, as physicians, can support, plans which in my opinion will not be detrimental to quality medical care or the free choice of physicians. One, the Federal Employees Health Benefit type of program, wherein the federal government pays up to one half with the employee paying the remainder, now covers over five million people. In this program patients have their choice of several plans, minimal coverage or maximal coverage, including both the Blues and private insurance. Whether in high, medium or low income groups, more than 80 per cent of these employees chose the high option plan, regardless of their own income level, which means that people want adequate coverage *regardless of the cost.* If we, as physicians, should support this type of coverage for the over 65 group, the mechanism for the operation is already set up; it has been in operation for two years now, and it has been highly successful. I see no reason why the federal government could not subsidize, in the same manner, a program up to a certain income level to be determined. Certainly people with over a certain income a year should be able to provide their own medical care in their own manner. Under this program, it would be up to the people themselves to decide upon their desires for adequate protection, and it seems to me that most people would flock to such a plan since the government would be paying a considerable part of the cost.

The other alternative is the Cramer Bill. If you have not read this Bill, I hope you will get a copy of it. It sets certain standards that an insurance policy would have to provide for the over 65 age group, and again, as under the first alternative, people would have the privilege of obtaining either Blue coverage or private insurance, and have better coverage than the King-Anderson type of legislation offers.

I believe that since we physicians are not economists, we should consider every type plan providing that (1) everyone over the age of 65 up to a certain income level would be covered and that (2) the Bill provide for free choice of physician and hospital without government interference.

If physicians would support one of these plans, I think there is no doubt that the Congress would pass it. And it would certainly remove politics from the area of good medical care.

C.K.D.

Overstretched Lungs

Chronic pulmonary emphysema is a disease of increasing importance, affecting principally middle-aged and elderly males whose respiratory ability has been impaired by advancing years, excessive smoking, and often chronic sinusitis and bronchitis. Not infrequently the disease is nearly asymptomatic and unsuspected until acute respiratory distress is precipitated by some sudden change in health.

Elsewhere in this issue of The Journal, Gravenstein has lucidly presented the problems encountered in administering general anesthesia to patients with pulmonary emphysema. His timely paper is recommended for it highlights the altered physiology in this disease and the steps which must be taken to avoid serious difficulty.

Respiratory physiologists have published much in recent years, and have made important advances in elucidating the deranged function and anatomy which characterize pulmonary emphysema. Unfortunately, their writings are so replete with new symbols and definitions that one is fre-

quently confused and often discouraged in attempts to "keep up with the literature." At the risk of oversimplification, the basic defect is one of distribution of the inspired air, with inadequate amounts of fresh air reaching the overdistended alveoli which contain large amounts of residual air. This results in an abnormally low alveolar oxygen pressure in sizable portions of the lung, and since capillary blood flow to these diseased segments is not reduced proportionally, there results an abnormal ventilation: perfusion ratio with decreased oxygen saturation of the blood. Sudden worsening can be expected from any factor which would further decrease the arterial oxygen saturation: decreased inspired oxygen pressure (at high altitude or with certain general anesthetics); interference with the mechanics of breathing (anesthesia, paralysis from a cerebral vascular accident, or pleurisy; or increased bronchial obstruction from asthma or infection); or lowered hemoglobin resulting from hemorrhage.

Recognition of the early case can offer much in the way of preventive measures and especially in avoiding the troubles Dr. Gravenstein discusses in his article. Unfortunately, the x-ray is often normal and pulmonary function studies are not available or not believed necessary. Suspicion of pulmonary emphysema should be aroused in treating any middle-aged or older man with a chronic "cigarette cough" or asthma, even when exertional dyspnea is denied, for it is often the exertion rather than the dyspnea which is absent. Poor movement of the ribs or of the diaphragms can be spotted quickly on physical examination, if looked for, and the "match test" can be performed at no cost of time or money.

The "match test"[1] is performed by asking the patient to blow out a match held at arm's length; the patient with emphysema can not blow it out because of slowed expiration. It fact, it might be well to incorporate the "match test" as a routine part of the physical examination, especially one performed prior to operation; the yield of positive cases would be higher than with the routine Kahn test, and treatment of the early case of pulmonary emphysema is no less rewarding than treating a previously undiscovered case of syphilis.

J.M.P

1. Stead, W. W.: Office and Bedside Evaluation of Pulmonary Function, J. Florida M. A. 85:1285-1289 (May) 1959.

Psychiatric Inpatient Units in General Hospitals in Florida

The report entitled "Survey of and Recommendations for Psychiatric Inpatient Units in General Hospitals in Florida," appearing in this issue of The Journal, is important and timely, not only for Florida but for the country at large. The American Medical Association has announced the First Congress on Mental Health and Illness to be held in Chicago on October 4, 5 and 6—calling the entire membership of 186,000 as well as the 13,000 members of the American Psychiatric Association to turn their attention to all those things in medical practice which relate to mental health and illness.

No one familiar with the functioning of the psychiatric inpatient service in the general hospitals can question the desirability of such facilities. I concur in the recommendation that the keynote to the expansion of general hospital psychiatry in this state is education, but think that realistic issues must be considered regarding the quality and quantity of education desirable. It is unrealistic to hope that a few lectures or seminars for general practitioners will result for the rural community in "comparable care" to that available in the metropolitan area where the trained psychiatric personnel is directly responsible for patient care.

The low average length of hospitalization in the psychiatric units in the general hospital cannot be attributed to newer and better forms of pharmacological developments primarily. Undoubtedly the professional experience of "know how and why and when" contributed by the psychiatrist has been a prime factor in early rehabilitation of the mentally ill patient. As for attempting to teach "psychotherapy" in a "quickie" course, I have many reservations. This is an

intensely personal art. The use of one's own personality in a therapeutic relationship can be as delicate as major surgery and require as much training, supervision, and experience. The majority of patients in the general hospital psychiatric units are experiencing an emotional crisis, and their irrational behavior can create anxieties with resulting nontherapeutic counter behavioral patterns in inadequately trained hospital personnel —whether it be the aide or the attending physician—yes, even the psychiatrist. But the latter is supposed to have been adequately trained to know himself and how to conduct himself in this emergency.

For all these reasons, I think it is ill-advised to attempt to open psychiatric units without at least part time psychiatric supervision. Despite the anticipated increase in psychiatric admissions, Florida now has two relatively new residency training programs in psychiatry and one may well expect that these residents will choose to remain in Florida. Could not some inducement be given to this younger group to circuit ride the rural areas? During the latter part of World War II I remember that I still felt energetic enough to visit regularly with the public health nurses the plantation hospitals on the outer Hawaiian Islands of Hawaii, Kauai, Maui, Molokai and others regarding patient care. And, many years before that as a practicing pediatrician and school health physician, I willingly and eagerly visited the new communities in the Glades in the company of the public health nurse to locate cases of "hookworm" and bring the patients in to the Good Samaritan Hospital in West Palm Beach for treatment. I also remember my discouragement when they returned to an area of reinfestation.

And this brings me to the mention already made of the lack of social services in the existing units. This is, I believe, a serious lack and is true for both the hospitals and the community clinics. Prior to the time when federal funds were available to establish community clinics, the pioneers such as The Commonwealth Fund and the National Committee for Mental Hygiene would not recommend the specialized service of a "child guidance clinic" unless there were adequate basic services in health, welfare and education in the community. I still think this was a sound policy and that the present clinics are seriously handicapped by the lack of sufficient child welfare and family service social case work services in the community. The workers who provide these services are the ones who can offer long term follow up and utilize continuing consultation service. In the same manner, the general practitioner should be provided with consultation service regarding the patient he knows and for whom he is responsible. This experience will have much more meaning to him than a theoretical lecture unrelated to his needs regarding a particular patient. In other words, an approach to the preceptor concept with continuing available consultation service is recommended in both the rural and urban community as an educational technique for the general practitioner and his ancillary aides prior to extending a superstructure of masonry on a faulty foundation of basic understanding and service.

Martha W. MacDonald, M.D.
Sarasota

Blue Shield for Senior Citizens

Florida physicians, through the Committee of Seventeen and the Board of Governors, have asked that Blue Shield provide coverage for senior citizens that will fulfill our promises to U. S. Senators and the American public. We, as physicians, have told them that we can take care of these older persons adequately and reasonably, better than through any government arrangement.

Blue Shield is ready. Throughout the nation Blue Shield Plans are presenting programs for senior citizens, programs which follow a national pattern, but which are individually designed to meet the particular needs of each Plan area, at a cost in conformity to the economy of that area. But, special programs for the aged are, of themselves, not enough. They must be made to work, proved effective, demonstrated adequate to provide realistic protection. These objectives can be accomplished only through the full cooperation and enthusiastic support of every participating physician backing the voluntary, nonprofit approach through unequivocal application of the principle of paid-in-full service. This collective action is what it will take to protect these older persons from devastating bills—and to extend our temporary reprieve from regimentation and government regulation of the private practice of medicine.

Permanent residents of Florida who are age 65 or over have an opportunity, from October 15 through November 15, 1962, to enroll in either of two combined Blue Shield-Blue Cross programs, no matter what their health condition may be. Payments for covered services of physicians will be made in accordance with the "L" type contract, which is a modification of the "K" schedule of benefits with service benefit qualifications of an annual income of $2,500, or a net worth of $25,000 for a single person, $4,000 income or net worth of $40,000 for a family. The net worth requirement is exclusive of homestead.

Although dependents are covered under a family contract, no maternity benefits are included. Under the comprehensive option, care is provided in an accredited nursing home and minor surgery may be performed in the outpatient department of a hospital. The lower cost standard option provides professional and hospital services comparable to those available to other individual subscribers.

Unfortunately, it is not possible to provide coverage to older persons at a low rate. Doctors will be asked to explain that protection is being provided for persons who can be expected to use their benefits more, a group in which there are no younger persons to provide the balancing effect necessary to obtain low rates. It will be well, also, to point out to them that, if they do not already have protection and are unable to obtain it, this is an opportunity that may not again be offered for some time.

Russell B. Carson, M.D., President
Blue Shield of Florida, Inc.
Fort Lauderdale

Association News

Summary of Board of Governors Meeting Held Sept. 21-23, 1962

Presidents and Secretaries Conference.—Approved the format and subjects for the Fifth Annual Conference of County Medical Society Presidents and Secretaries to be held at the Hotel Robert Meyer, Jacksonville, Saturday afternoon and Sunday morning, January 12-13, 1963.

1963 Annual Meeting.—Adopted the format for the 1963 annual meeting of the Florida Medical Association to be held at the Diplomat Hotel, Hollywood, as follows:

May 15 (Wednesday)
All-Day Set up exhibits
May 16 (Thursday)
9:30 a.m. First meeting House of Delegates
11:00 a.m. Blue Shield Annual Meeting
2:30 p.m. First Scientific Assembly
Evening Free
May 17 (Friday)
9:00 a.m. Scientific Film Program
9:00 a.m. Reference Committees
11:00 a.m. General Session—President's Guest Speaker
2:00 p.m. Second Scientific Assembly
6:30 p.m. President's Reception
7:30 p.m. Alumni and Fraternity Socials
May 18 (Saturday)
All Day Specialty group meetings
Evening Specialty group socials
May 19 (Sunday)
9:30 a.m. Second meeting House of Delegates
Noon Adjournment

FMA Building.—Adopted the recommendations of the Executive Committee for the proposed addition to the FMA Building and authorized the Executive Committee to proceed with plans and construction.

By-Laws, Entrance Fee.—Approved for presentation to the House of Delegates amendments to the By-Laws to exempt new members from paying the $10 entrance fee who are interns, residents and fellows in training programs approved by the AMA Council on Medical Education & Hospitals, and waived the entrance fee for this group for 1963, subject to a change in By-Laws being adopted by the House of Delegates in May.

REVIEWED VARIOUS FMA COUNCIL AND COMMITTEE REPORTS, AMONG THEM:

Legislation.—Approved the recommendations of the Council on Legislation and Public Agencies for further implementation of Kerr-Mills legislation in Florida for presentation to the 1963 session of the Florida Legislature.

Relative Value Studies.—Approved publication of the FMA Relative Value Studies recently completed by the Committee on Fee Schedules in consultation with the Council on Specialty Medicine.

Osteopathy.—Approved the past activities of the Committee on Osteopathy and its projected plans and adopted the following opinion to augment present policy of the Association:

"The Board of Governors of the Florida Medical Association has interpreted the sentence 'Until the present overall situation throughout the State changes, our attitude withholding professional recognition of osteopaths as a group must be maintained.' *to include individual osteopaths as well as groups unless otherwise required by law.* There are a few counties in which osteopaths act as county physicians, in which cases it is sometimes necessary for a doctor of medicine to deal with osteopaths as county officials. The granting of hospital privileges is a function of individual hospital boards and as such is not sub-

ject to approval of the Florida Medical Association. Where osteopaths are admitted to practice in a hospital in which doctors of medicine practice, it has been held to be unethical for a doctor of medicine to have any professional relationship with the osteopath. This includes consultations, supervising the work of the osteopath through review of medical records, tissue committees, etc., or giving any other indication of professional recognition.

"Since the Florida Medical Association does not evaluate the competence of individual practitioners of a healing art (other than doctors of medicine), it is held that the individual county medical societies are not competent to do so either."

First Maternal Mortality Survey Florida Deaths in 1961

In 1961 there were 116,886 live births and 54 maternal deaths in Florida. Three additional maternal deaths which occurred in Florida residents outside the state are included in the mortality of this state by established national policy.

These three deaths, plus three deaths which occurred under the care of osteopaths or naturopaths, unfortunately could not be studied by the Committee on Maternal Health. Two deaths, occurring at home in remote areas, were not sufficiently documented to allow classification. Thus, a total of 49 maternal deaths was studied in the first Maternal Mortality Survey.

The maternal death rate (the death of any women dying of any cause whatsoever while pregnant or within 90 days of termination of pregnancy) was 4.8 per 10,000 live births. The national average is 4.5; the rate in Florida the previous year, 1960, was 4.6 per 10,000 live births.

The obstetric death rate (the number of maternal deaths due to direct obstetric cause) was 4.3 per 10,000 live births. This rate, always slightly lower, is more significant, as it excludes the indirect and nonrelated causes of death in pregnant or puerperal women.

Among direct obstetric causes of death, hemorrhage accounted for 45 per cent, by far the most frequent of all causes. Hemorrhage most frequently followed uterine rupture or abruptio placentae. Infection caused 16 per cent, and toxemia and embolism each accounted for 8 per cent of the deaths.

Thirty-four deaths occurred among nonwhite mothers, almost all of high parity. The obstetric death rate among nonwhite mothers was seven times that of white mothers. The need for antepartum care, hospitalization for delivery and much improved hospitals for Negroes is apparent.

Several unusual causes of death deserve consideration. Three women, alone and without a telephone or other means of communication, were exsanguinated in their own homes without being able to summon help. One died of ruptured isthmic tubal pregnancy, another of early incomplete abortion, and the third of placenta praevia centralis at term. Two other patients with ectopic pregnancy, because of inadequate communication plus their own procrastination, were admitted to emergency rooms in extremis and died promptly. These deaths show only too clearly that adequate communication and transportation for pregnant women are as essential as good medical care.

Following cesarean hysterectomy, performed by a competent surgeon in an adequate hospital, one patient died of venous bleeding from a broad ligament pedicle. Such deaths tend to perpetuate the argument of just how safe this procedure is.

One mother died of a massive retroperitoneal hematoma originating in the apex of a routine median episiotomy. A normal multipara in early labor died suddenly of coronary occlusion while receiving an enema. These deaths bring to mind again that the most routine conditions and procedures can be followed by unexpected death.

The autopsy rate among reported deaths was 54 per cent. This is a creditable rate when one considers that many deaths occurred in remote areas where facilities are limited.

The cooperation of physicians in responding to the written questionnaire was most gratifying. Over 95 per cent of all physicians responded promptly with very complete records. Probably an even greater percentage of response can be anticipated in future years. If any resentment by physicians to the survey was incurred, it was not expressed to members of this Committee.

Efforts are being made this year for the passage of conventional protective laws by the state legislature to allow this Committee, and other similar committees, to function properly without jeopardizing the physicians involved. Until these laws are passed, the Committee on Maternal Health cannot make specific written appraisal or recommendations to individual physicians. Such comments are admissable, in court, as evidence in malpractice suits. During this interval, written reports in The Journal and general recommendations will be used to make available the findings of this Committee.

Grateful acknowledgement is made to the members of the Committee, Drs. Douglas, Sory, Stover, and Watson, for their unsparing labor in studying these deaths, and to Dr. L. L. Parks of the Bureau of Maternal and Child Health for his constant help and encouragement.

James M. Ingram, M.D.
Chairman
Committee on Maternal Health

News

The Department of Psychiatry of the University of Miami School of Medicine will present a seminar dealing with "Psychiatry in Medical Practice" beginning Feb. 6, 1963. Limited to 15 participants, sessions will be held two hours each Wednesday evening for 18 weeks. Physicians may obtain information concerning the seminar from the Department of Psychiatry, Jackson Memorial Hospital, Miami 36.

The Seventeenth Annual Florida Midwinter Seminar in Ophthalmology and Otolaryngology will be held at the Americana Hotel, Bal Harbour, Miami Beach, February 4-9. The complete program is scheduled for release on December 1. The Seminar is being presented in cooperation with the University of Miami School of Medicine and the University of Florida College of Medicine.

The W. B. Saunders Company has announced the availability of a $15,000 grant the purpose of which is to provide financially for a year's leave of absence for a distinguished investigator who has been doing fruitful and significantly important biomedical laboratory research over the past several years and who would like to have time for

thought and for preparation of his work in monographic form. The recipient will not have to agree to publish his monograph with the Saunders Company and, instead of a book, will be free to write a series of journal articles reviewing his research. Information may be obtained from Dr. Robert F. Loeb, Chairman of the Selection Committee, care of W. B. Saunders Co., West Washington Square, Philadelphia 5.

The Rehabilitation Center for Crippled Children and Adults of the University of Miami School of Medicine has announced a one week course in "Principles in Rehabilitation of the Physically Handicapped," on January 7-11 at the Rehabilitation Center in Miami. Interested physicians should contact Dr. Pedro Arroyo Jr., Medical Director of the Center at 1475 N. W. 14th Avenue.

Dr. J. Champneys Taylor of Jacksonville has been appointed a member of the Board of Medical Examiners by Governor Farris Bryant.

Availability of fellowships and grants for research in the cardiovascular field and in related problems in the basic sciences has been announced by the Research Committee of the Florida Heart Association. Application forms, which must be completed by December 1, are available from the Association at 5350 15th Way North, St. Petersburg 3.

The American College of Chest Physicians has issued an official statement urging its members, and the medical profession in general, to intensify their educational campaign directed toward the public, and the youth in particular, relative to the hazards of smoking. Convinced that sufficient evidence has been accumulated to warrant issuing a statement regarding cigarette smoking and health, the Board of Regents approved the resolution which stated in part that the weight of scientific evidence distinctly indicates that cigarette smoking and the inhalation of other atmospheric pollutants have an association relationship which strongly suggests a causal connection with chronic bronchitis, pulmonary emphysema, cor pulmonale, cardiovascular diseases and cancer of the lung.

The first camp for diabetic children to be arranged by the Florida Diabetes Association has been described as most successful. It ended September 1. A full report on the camp is to be made at a later date.

The 16th Clinical Meeting of the American Medical Association will be held in Los Angeles November 25-28. The complete program and forms for physician registration and hotel reservations may be found in the October 27 Journal of the American Medical Association.

Dr. Irwin S. Leinbach of St. Petersburg has been appointed Chairman of the Governor's Committee on Employment of the Handicapped for the state of Florida.

The semi-annual examination of the American Board of Pathology is being held November 17 in the Deauville Hotel at Miami Beach, according to announcement by Dr. James N. Patterson of Tampa, a member of the Board. Dr. Patterson and Dr. William W. Trice Jr. of Tampa, also Dr. Malcolm B. Burris of Lakeland; Drs. Leo E. Reilly and Fernando A. Rubio Jr. of St. Petersburg; Dr. James B. Leonard of Clearwater, and Drs. James J. Griffitts and Alan Richardson-Jones of Miami attended the Congress of International Blood Transfusion and the meeting of the International Society of Hematology held in Mexico City September 5-15.

Meetings

November

Seminar on Nontuberculous Respiratory Diseases, November 8-9, Duval Medical Center, Jacksonville

Southern Medical Association 56th Annual Meeting, November 12-15, Hotel Fontainebleau, Miami Beach

Florida Pediatric Society, November 15-18, Causeway Inn, Tampa

Southeastern States Cancer Seminar, November 15-17, Hotel George Washington, West Palm Beach

Fall Meeting, Florida State Surgical Division of International College of Surgeons, November 16-17, Gainesville

American Medical Association, 16th Clinical Meeting, November 25-28, Biltmore Hotel, Los Angeles

Florida Obstetric and Gynecologic Society, November 30, December 1-2, Crystal River

December

Florida Society of Ophthalmology and Otolaryngology, December 7-9, Paradise Point Hotel, Crystal River

January

Seminar in Surgery, January 9-11, University of Florida College of Medicine, Gainesville

Conference of Presidents and Secretaries, Fifth Annual, Florida Medical Association, January 12-13, Hotel Robert Meyer, Jacksonville

Seminar in Pediatrics, January 31-February 2, University of Florida College of Medicine, Gainesville



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Descriptive literature and directions for use detailed in Physicians' Product Brochure No. 81 available from G. D. Searle & Co., P. O. Box 5110, Chicago 80, Illinois.

1. Demeulenaere, L.: Action du R 1132 sur le transit gastraintestinal, Acta Gastroent. Belg. 21 674-680 (Sept.-Oct.) 1958.
2. Kasich, A. M.: Treatment of Diarrhea in Irritable Colon, Including Preliminary Observations with a New Antidiarrheal Agent, Diphenaxylate Hydrachloride (Lomotil), Amer. J. Gastroent. 35:46-49 (Jan.) 1961.
3. Weingarten, B.: Weiss, J., and Siman, M.: A Clinical Evaluation of a New Antidiarrheal Agent, Amer. J. Gastroent. 35:628-633 (June) 1961.

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Brady, Paul E., Fort Myers
Branning, Bowman W., Coral Gables
Britsch, William P., Miami
Castillo, Rosauro A., St. Petersburg
Cleveland, William W., Miami
Conti, Robert F., Fort Myers
Crawford, Porter F., Dunedin
Davis, Harold E., Miami
Deam, John H., Holmes Beach
Elstun, Wesley B., Tampa
Elton, Sanford E., Bradenton
Estes, Marion M., Daytona Beach
Gagliano, Theodore E., Tarpon Springs
Golder, Harold K., Eau Gallie
Graham, Angus W. Jr., Bradenton
Haslup, Allen L., St. Petersburg
Hennessey, Thomas C., St. Petersburg
Holmes, Thomas G., Pensacola
Hood, Bobby J., Clearwater
Hyden, William H., Cocoa Beach
Isley, Joseph K. Jr., Fort Myers
Jones, Carlton E., Dunedin
Kass, Donald M., Miami Beach
Katz, Henry E., Clearwater
Knowlton, Isabel, Key West
Lamb, Ernest E. (Col.), Ocala
Lancaster, Robert J., St. Petersburg
Landstra, Robert F., St. Petersburg
LaPlatney, Donald R., Fort Pierce
McCloy, Dixon R., Panama City
McHenry, Laudie E. Jr., Melbourne
Meldrum, Thomas W., Jacksonville
Meyer, John E., St. Petersburg
Moseley, Dayton L. Jr., Tampa
Neuwirth, Abraham A., Tampa
Parrish, Henry M., Ocala
Payne, Voris R., Bradenton
Raulerson, Hiram H. Jr., Okeechobee
Reilly, Walter M., Zephyrhills
Schen, Charles R., Fort Myers
Silver, James A., Clearwater
Sloss, Joseph H., Bradenton
Snodgrass, Richard W., Daytona Beach
Sprenger, Thomas R., Bradenton
Stemle, Duane L., Titusville
Toledo, F. Humberto, Tampa
von Storch, Theodore J. C., Miami
Wall, Bithel, Tampa
Watson, William N., Milton
White, Alvyn W. Jr., Pensacola
White, Elga B., Blountstown

Associate

Amarante, Jerome N., Hollywood
Atkin, Norman, Hollywood
Bartley, Thomas D., Gainesville
Becker, David J., Miami
Blakey, Billy R., Maitland
Bookhardt, Alfred L. (Col.), Orlando
Brooks, Phillips A., Orlando
Calise, Peter J., Jacksonville
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FOR SALE OR LEASE: Jacksonville area. Will sell or lease building, furniture and equipment of recently deceased General Practitioner. Hospital facilities 10 minutes drive. Price based on tangible assets. For further particulars write to 69-485, P.O. Box 2411, Jacksonville, Fla. or phone 284-3434, Green Cove Springs.

WANTED: Board qualified or Board certified Surgeon to join me in five man group in Miami. Must have Florida license. Must like to work. $1,000 per month. Partnership in three years if mutually satisfactory. Write 69-490, P.O. Box 2411, Jacksonville, Fla.

PEDIATRICIAN WANTED: As associate with another pediatrician with large established practice, Central Florida city, good hospitals. Write 69-492, P.O. Box 2411, Jacksonville, Fla.

WANTED: Competent, medical Neurologist-Electroencephalographer needed to work in loose association with psychiatric group in Jacksonville, teaching and continued research expected. Write 59-493, P.O. Box 2411, Jacksonville, Fla.

WANTED: Surgeon to associate with qualified surgeons in Miami area. Salary first two years. Contact 69-499, P.O. Box 2411, Jacksonville, Fla.

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WANTED: General practitioner for association leading to partnership with established general practitioner, Melbourne, Brevard County, middle east coast near Cape Canaveral. Write 69-498, P. O. Box 2411, Jacksonville, Fla.

FOR SALE: Internal medicine practice (16 years) of deceased physician including equipment, laboratory and office facilities. Financial arrangements flexible, office still open with personnel. Contact Mrs. Grover C. Collins, P.O. Box 427, Palatka, Fla., or phone EAst 5-3381.

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PEDIATRICIAN WANTED: For association in Hollywood, Fla. Must be Board qualified or certified. For information contact Medical Business Consultants, 1101 N.E. 79th St., Suite 205, Miami, Fla. Telephone PL 9-0230.

FOR SALE: 300 ft. frontage, pie-shaped lot, 4955 Haines Rd., N., St. Petersburg, Fla., zoned professional. $30,000-$15,000 down, balance in 10 years. Has two bedroom house on property rented for $65 per month. Traffic count 423 per hour. William H. Williams. Phone ORL-7291.

OBSTETRICIAN - GYNECOLOGIST: To take over expanding practice in Southeast coastal city. Returning north for family reasons. Excellent opportunity. Write 69-502, P.O. Box 2411, Jacksonville, Fla.

WANTED: Certified or Board eligible Ophthalmologist for air-conditioned office ready to occupy. Excellent unopposed lower East coast location. Write 69-503, P.O. Box 2411, Jacksonville, Fla.

PEDIATRICIAN NEEDED: To occupy office adjoining that of an obstetrician. Excellent lower East coast community of fine homes. Reasonable rent. Write 69-504, P.O. Box 2411, Jacksonville, Fla.

GENERAL PRACTITIONER WANTED: To take over large practice of deceased doctor. 10 minutes drive to hospital. Files available on thousands of patients. Replies answered immediately. Write Mr. Milton C. Woodard, Pinetta, Fla.

FOR RENT: Complete office 450 sq. ft. at $2.00 per sq. ft. Ready to move in. Ample parking space, located on main thoroughfare. Call F. L. Mikes, M.D. WH 1-2420, Pompano Beach Medical Bldg., 2701 Atlantic Blvd., Pompano Beach, Fla.

GENERAL PRACTITIONER: New professional office for rent Cocoa, Fla. Ready for occupancy Nov. 1. 1200 sq. ft. floor space. Designed for physician. Wired for X-Ray. Nicely paneled personal office and waiting room. 5 examining rooms each equipped with wash basin. Laboratory. Central air-conditioning system with reverse cycle for central heat. Adjoining new upper class 30 unit furnished apartment complex. Ground floor corner location with exterior professional design. 3 separate entrances. Choice location in fastest growing county in U.S. For information call A. A. Annis, Newton 6-1872 or write A. A. Annis, Builder, P. O. Box 6, Cocoa, Fla.

CUSTOM-MADE ORTHOPEDIC SHOES AND ARCH SUPPORTS: Expert shoe rebuilding. Orthopedic prescriptions. Dr. Scholls' footwear for men, women and children. Brauner and Tiliakos Shoe Co., Inc., 215 W. Church St., Jacksonville. Phone 354-0904.

UROLOGIST WANTED: To associate with well established Urologist in Tampa. Excellent opportunity. Arrangements open. Write 69-505, P.O. Box 2411, Jacksonville, Fla.

UROLOGIST: Age 31, family, Board eligible, desires position as associate or individual practice in accredited hospital. Write 69-506, P.O. 2411, Jacksonville, Fla.

CHIEF RADIOLOGIST, Board certified, direct department in 570 bed general hospital; diagnostic and therapeutic; gross volume in excess of $450,000; contract negotiable. Address inquiries to Administrator, P.O. Box 1438, St. Petersburg, Florida.

WANTED: General Practitioner for senior citizens community development. Del Webb's Sun City, Hillsborough County, Tampa Bay Area between Tampa and Bradenton. Contact Steven K. Fair, Del E. Webb Corp., P.O. Box 5000, Sun City Center. Phone 645-3286.

WANTED: Position with group or associate in Florida. Surgeon, Board certified, 40 years old, have Florida license. Write 69-507, P.O. Box 2411, Jacksonville, Fla.

The Florida Medical Association offers placement assistance through the Physician Placement Service, P.O. Box 2411, Jacksonville 3. This service is for the use of physicians seeking locations, as well as physicians seeking associates.

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Ritter "75" Universal Table

Call Us For All Kinds of Equipment

BRINGS POWERED COMFORT TO BUSY PHYSICIANS! This all-new Ritter Examining and Treatment Table has features vitally important to the physician as well as his patients. The Ritter "75" eliminates bending and stooping. It raises . . . lowers . . . tilts at the touch of the exclusive mobile foot control shown above. This Table provides maximum ease and efficiency in handling patients of all ages and sizes. Many other new features.

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Telephone: ELgin 5-8391
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SPECIAL COUGH FORMULA
for Children

Pediacof®

SOOTHING DECONGESTANT AND EXPECTORANT

Each teaspoon (5 ml.) contains:

Codeine phosphate	5.0 mg.
Neo-Synephrine® hydrochloride (brand of phenylephrine hydrochloride)	2.5 mg.
Chlorpheniramine maleate	0.75 mg.
Potassium iodide	75.0 mg.



Bright red, pleasant tasting, raspberry flavored syrup

Dosage:

Children from 6 months to 1 year, 1/4 teaspoon; 1 to 3 years, 1/2 to 1 teaspoon; 3 to 6 years, 1 to 2 teaspoons; 6 to 12 years, 2 teaspoons. Every four to six hours as needed.

How Supplied:
Bottles of 16 fl. oz.

Available on prescription only.

Exempt Narcotic

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LABORATORIES
New York 18, N Y

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BETADINE—The only germicide whose color indicates a germ-free environment—provides lasting protection and is the most potent non-irritating topical antiseptic known.

for the first time...
a universal microbicidal agent
that does not sensitize
or retard healing

Betadine®

Povidone-Iodine NND

Kills bacteria, viruses, fungi, yeasts and protozoa on contact. Non-injurious to skin, exposed tissue or mucous membranes.

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PHYSICIANS PRODUCTS CO., INC.
PETERSBURG, VIRGINIA



Day and night– less wheezing, coughing, labored respiration in chronic bronchitis and emphysema

New Isuprel Compound Elixir is a balanced expectorant bronchodilator. It contains potassium iodide to promote expectoration and relieve dry cough. Its three bronchodilators, Isuprel, ephedrine, and theophylline, keep bronchi continuously dilated. Luminal is included to negate possible side effect from adrenergic medication and to provide very mild sedation for the patient.

New Isuprel Compound Elixir alleviates symptoms...prolongs relief in chronic bronchitis and emphysema.

Each good-tasting vanilla-flavored tablespoon (15 cc.) contains:

Isuprel® (brand of isoproterenol) HCl	2.5 mg.
Ephedrine sulfate	12 mg.
Theophylline	45 mg.
Potassium iodide	150 mg.
Luminal® (brand of phenobarbital)	6 mg.
Alcohol	19%

Adult Dose: 2 tablespoons 3 or 4 times daily.

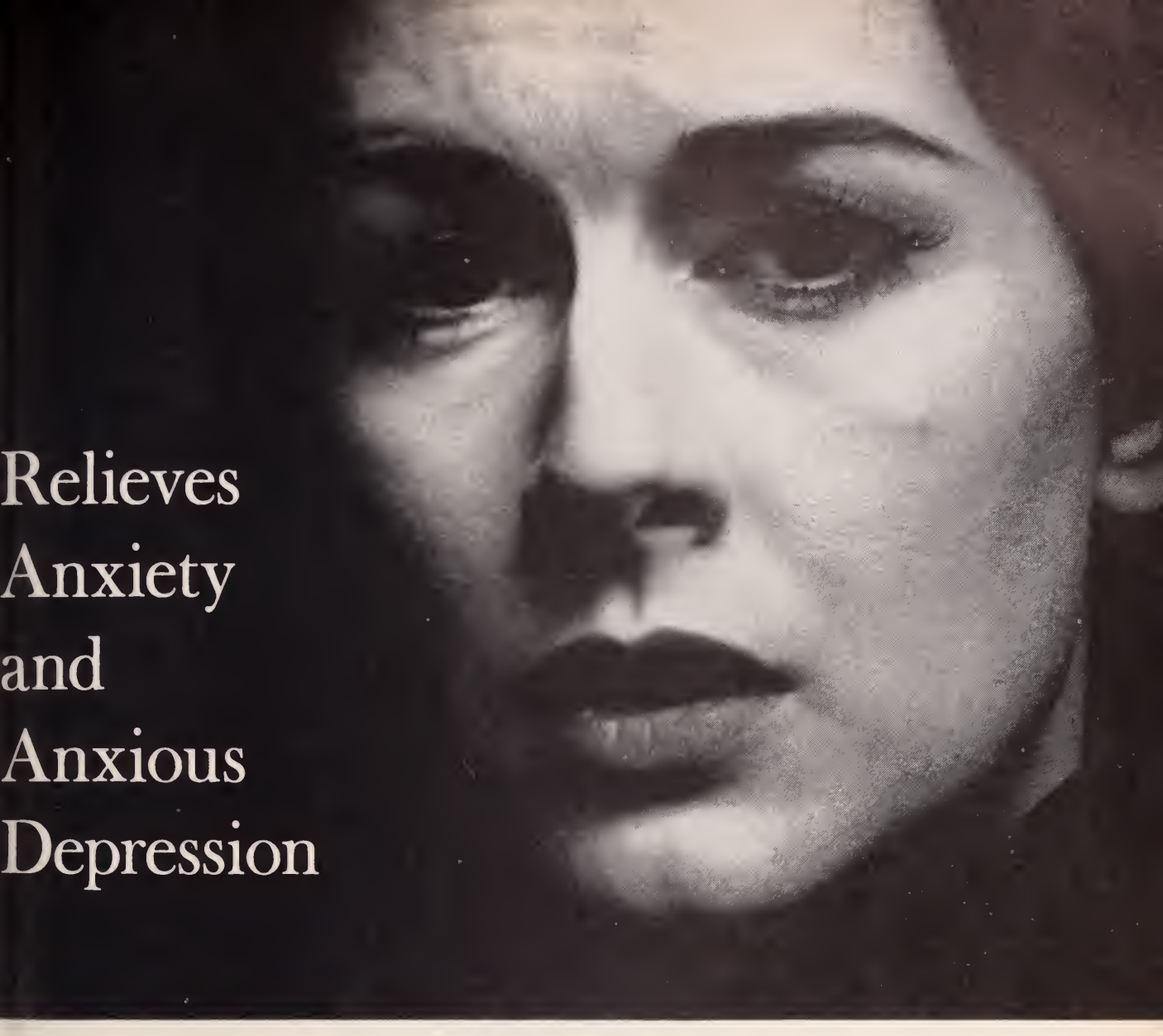
How Supplied: Isuprel Compound Elixir is supplied in bottles of 16 fl. oz.

Before prescribing be sure to consult Winthrop's literature for additional information about dosage, possible side effects and contraindications.

New ISUPREL® compound ELIXIR

Winthrop LABORATORIES
New York 18, N.Y.

ISUPREL AND LUMINAL, TRADEMARKS REG. U. S. PAT. OFF.



Relieves Anxiety and Anxious Depression

The outstanding effectiveness and record of safety with which Miltown relieves anxiety and anxious depression—the type of depression in which either tension or nervousness or insomnia is a prominent symptom – has been clinically authenticated time and again during the past seven years. This, undoubtedly, is one reason why physicians still prescribe meprobamate more often than any other tranquilizer in the world.

Miltown®

meprobamate (Wallace)

Usual dosage: One or two 400 mg. tablets t.i.d.

Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50. Also as MEPROTABS® – 400 mg. *unmarked,* coated tablets; and in *sustained-release* capsules as MEPROSPAN®-400 and MEPROSPAN®-200 (containing respectively 400 mg. and 200 mg. meprobamate).

WALLACE LABORATORIES / *Cranbury, N. J.*

Clinically proven in over 750 published studies

1. Acts dependably – without causing ataxia or altering sexual function
2. Does not produce Parkinson-like symptoms or liver damage
3. Does not muddle the mind or impair physical activity

M-7381

what your patients need to know about Aspirin



As you know, the confidence your patients place in a certain treatment or drug often helps to reinforce the relief they get from it. That's why it's often a good idea to explain the reasons for your recommendations, even in the simplest cases.

For example, aspirin. You probably recommend it more than any other drug, as an analgesic, as an antipyretic, as an aid to sleep when restlessness is caused by minor discomforts. Certainly aspirin is the most versatile and one of the most effective drugs in the arsenal of medicine.

But aspirin is such a common and such a safe drug that most laymen vastly underrate it. To use it with the utmost confidence, they need to know more about it. So next time, take a minute or two to explain what a uniquely valuable drug aspirin really is. You know it; your patients will be reassured to know it, too.

5-grain tablets



1¼-grain tablets



For professional samples,
write The Bayer Company,
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Trocinate®

Brand of Thiphenamil HCl.

FOR DIVERTICULITIS, MUCUS COLITIS,

IRRITATIVE DIARRHEA, IRRITATIVE URETERITIS,

BLADDER SPASM

Trocinate is a musculotropic antispasmodic with no appreciable anticholinergic action. It relieves spasms of the lower bowel and genito-urinary tract by direct action on the contractile mechanism of smooth muscles. The absence of any appreciable action on the autonomic nervous system eliminates the usual side-effects. It may be safely used in glaucoma. Each tablet contains 100 mgs. Trocinate HCl.

USUAL DOSAGE: 2 tablets, 4 times a day. Maintenance dosage is frequently lower.

Dispensed in bottles of 40 and 250 tablets.

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Stelazine® will stop anxiety—but not your patient!
brand of trifluoperazine

To be truly useful in your office patients, an ataractic agent must not only relieve anxiety; it must also leave these patients sufficiently alert to engage in their normal activities.

'Stelazine' is such an agent. Its ability to relieve anxiety without producing appreciable sedation has been established in thousands of patients and documented by many published reports. Typical is the finding of Kolodny,[1] who concluded that the primary advantage of 'Stelazine' over many other tranquilizers seems to be "its ability to relieve symptoms of anxiety without undue interference with alertness."

When you wish to relieve anxiety, yet encourage the patient to engage in his normal activities, consider 'Stelazine'.

1. Kolodny, A.L.: Dis. Nerv. System *22*:151 (Mar.) 1961.

For prescribing information, please see *PDR* or available literature.

Smith Kline & French Laboratories, Philadelphia
leaders in psychopharmaceutical research

SK&F



"They keep saying I'm sloppy!"



Nicozol® helps you restore your geriatric patients' interest in themselves

NICOZOL therapy can help you brighten the outlook of your aging patients who tend towards (1) untidiness, (2) irritability, (3) incompatibility, (4) lack of interest, and (5) loss of memory or alertness.

The NICOZOL formula is designed to improve mental acuity, increase the supply and use of oxygen in the brain, improve peripheral circulation—without excitation, depression, or other untoward effects.

NICOZOL can help you keep your aging patients actively alert and at ease with themselves, their families, and others.

Supplied: NICOZOL tablets (and capsules) in bottles of 100 and 1000. NICOZOL Elixir in pints and gallons.

Average Dose: 1 to 2 tablets (or capsules) 3 times a day. 1 teaspoonful elixir 3 times a day.

Formula: each tablet or capsule contains:
Pentylenetetrazol.....100 mg.
Nicotinic Acid.....50 mg.
each teaspoonful (5 cc.) elixir contains:
Pentylenetetrazol.....200 mg.
Nicotinic Acid.....100 mg.

HART | Division of A. J. Parker Co. LABORATORIES Winston-Salem, North Carolina

NICOZOL®



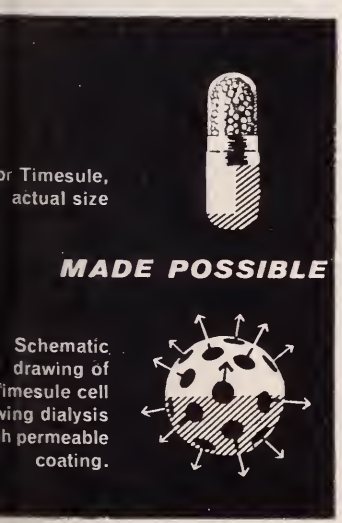
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Around the clock relief for DISTRESS OF COLDS

ISOCLOR® TIMESULE®

A NEW COMPREHENSIVE RELIEF

- **Relief usually starts in minutes**—to open nasal passages, stop running nose and eyes, sneezing, wheezing, itching and post-nasal drip
- **Relief usually lasts up to 12 hours** with a single oral dose
- **Gives both** upper respiratory decongestion and bronchodilatation to relieve chest discomfort
- **With minimal** drowsiness, CNS or pressor stimulation



r Timesule, actual size

Schematic drawing of imesule cell wing dialysis h permeable coating.

ALSO AVAILABLE: ISOCLOR TABLETS AND LIQUID.

MADE POSSIBLE BY THE NEW TIMESULE RELEASE MECHANISM

Release with the Isoclor Timesule is at a relatively even, constant rate, independent of gastrointestinal motility, pH, or enzymatic activity. Each Timesule pellet is actually a micro dialysis cell, consisting of a drug core with coating of dialyzing membrane of precisely controlled permeability. Approximately 20% of active drugs are released within one hour and 80% in 8 hours. Peaks and valleys of over-release and under-release are minimized for constant, controlled relief with minimum side effects.

EACH ISOCLOR TIMESULE CONTAINS:
Chlorpheniramine maleate ..... 10 mg.
d-Isoephedrine HCl ..... 65 mg.
In a special form providing prolonged therapeutic effect.

DOSE: Adults: One Timesule every 12 hours, or as directed.

WARNING: Use with caution in patients suffering from hypertension, cardiac disease, hyperthyroidism or diabetes. Patients susceptible to the soporific effect of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CHARLES C. HASKELL & COMPANY
Richmond, Virginia

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gratifying
relief
in bronchial
asthma





nsurpassed for total patient benefits

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Triamcinolone Lederle



With ARISTOCORT, asthmatic patients obtain sustained relief of wheezing, dyspnea, and spasmodic coughing. It is of particular value in ameliorating severe attacks that may have serious sequelae. With ARISTOCORT, many patients who might otherwise be invalids are able to continue their customary livelihoods or maintain their regular household activities. Yet this symptomatic relief is not often accompanied by the hormonal collateral effects —sodium retention, edema, emotional disturbance, insomnia, voracious appetite— that so often have been a deterrent to steroid therapy.

SUPPLIED: Scored tablets (three strengths), syrup and parenteral. Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

Lederle

LEDERLE LABORATORIES
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Pearl River, New York

Logical support for the atherosclerosis diet

A recent report* in the *JAMA* on atherosclerosis states, "...it appears logical to attempt to reduce high concentrations of cholesterol and other serum lipids as an experimental therapeutic procedure."

Since this report recognizes table spreads as an important source of dietary fat, it is in your professional interest to know about the fatty-acid composition of the margarines from Mrs. Filbert's.

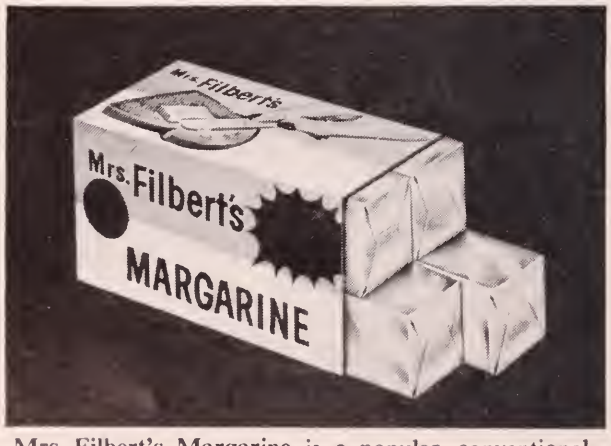
Each of Mrs. Filbert's Margarines is over 80% unsaturated and offers unique properties useful in the control of serum lipids by dietary means.

Moreover, when you recommend any one of Mrs. Filbert's Margarines, your patient is assured of unmatched taste and flavor satisfaction—an important consideration in promoting adherence to any therapeutic regimen.

*AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181: 411-423 (August 4, 1962).



Mrs. Filbert's Corn Oil Margarine is made from 100% corn oil, over 50% of which retains its *liquid* characteristics. Because of its high linoleic content, its ratio of polyunsaturates to saturates exceeds 1.5 to 1 . . . and equals the highest level available today in *any* corn oil margarine. Of the total fatty-acid content, 28% is cis-cis linoleic acid. Thus, it can be most useful in a program for reducing serum cholesterol levels.



Mrs. Filbert's Margarine is a popular, conventional-type margarine with no premium price. It is made from the finest domestic vegetable oils, which are partially hydrogenated for texture, but remain over 80% unsaturated. It has a ratio of polyunsaturates to saturates in excess of 1 to 1. Of the total fatty-acid content, 7% is cis-cis linoleic acid.



Mrs. Filbert's Whipped Margarine contains the same number of calories per pound as ordinary margarine, but contains 30% *fewer calories per pat* because it is whipped. When spread normally, it provides satisfaction with a reduction in fat calories. And its ratio of polyunsaturates to saturates exceeds 1 to 1. Of the total fatty-acid content 7% is cis-cis linoleic acid.

If you would like information about Mrs. Filbert's family of margarines—including detailed listings of their component characteristics—please write us.

J. H. FILBERT, Inc.

Baltimore 29, Maryland



Diagnosis: Rheumatoid arthritis

Complication: Pocketbook syndrome

New therapy: HEXADROL®

Dexamethasone 'Organon'

The corticosteroid unexcelled in clinical benefits with cost-to-patient greatly reduced

When you prescribe HEXADROL you give your patients all the clinical advantages of the newer, most effective and best-tolerated corticosteroids. At the same time, you provide relief of the Pocketbook Syndrome, a most common complication of therapy with a steroid of choice. This new and unique benefit of important savings to your patients results from Organon leadership in research, development, and new, more efficient manufacturing processes.

Clinical background? This steroid has a recorded history unequaled in scope and authoritativeness among all the newer corticoids. **Quality?** HEXADROL, brand of dexamethasone 'Organon'...your assurance of professional quality through research, production and control. **Dosage flexibility?** Tablets 0.75 mg. and new strength 0.5 mg., plus new form, Elixir (0.5 mg. per 5 ml.) now available to meet prescription needs.

Cost-to-patient? Greatly reduced! Why not check with your local pharmacist on prescription cost to your patients?

Organon

The Oldest Name

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An Institution for the diagnosis and treatment of Psychiatric and Neurological illnesses, rest, convalescence, drug and alcohol habituation.

Insulin Coma, Electroshock and Psychotherapy are employed. The Institution is equipped with complete laboratory facilities including electroencephalography and X-ray.

Appalachian Hall is located in Asheville, North Carolina, a resort town, which justly claims an all around climate for health and comfort. There are ample facilities for classification of patients, rooms single or en suite.

Wm. Ray Griffin Jr., M.D.
Robert A. Griffin, M.D.

Mark A. Griffin Sr., M.D.
Mark A. Griffin Jr., M.D.

For rates and further information write Appalachian Hall, Asheville, N. C.





sign of infection?

symbol of therapy!

Ilosone® is better absorbed—It provides high, long-lasting levels of antibacterial activity—two to four times those of other erythromycin preparations—even on a full stomach. **Ilosone is bactericidal**—It provides bactericidal action against streptococci, pneumococci, and some strains of staphylococci. **Ilosone activity is concentrated**—It exerts its greatest activity against the gram-positive organisms—the offending pathogens in most common bacterial infections of the respiratory tract and soft tissues.

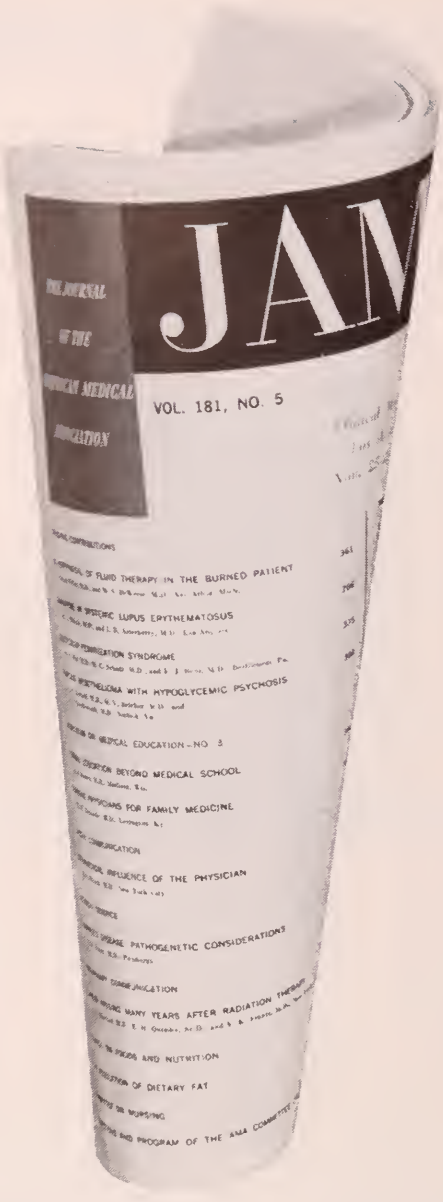
The usual dosage for infants and for children under twenty-five pounds is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. For adults and for children over fifty pounds, the usual dosage is 250 mg. every six hours. In more severe or deep-seated infections, these dosages may be doubled. Ilosone is available in three convenient forms: Pulvules®—125 and 250 mg.*; Oral Suspension—125 mg.* per 5-cc. teaspoonful; and Drops—5 mg.* per drop, with dropper calibrated at 25 and 50 mg.

Lilly

This is a reminder advertisement. For adequate information for use, please consult manufacturer's literature.
Eli Lilly and Company, Indianapolis 6, Indiana. Ilosone® (erythromycin estolate, Lilly) *Base equivalent

232589

Ilosone works to speed recovery





Because you are aware of the AMA statement on fat in the diet...

"Increasing the ratio of poly-unsaturated fat to saturated fat in the diet is the preferred method for treating the 'usual' hypercholesteremia."

From the Aug. 4, 1962 issue of The Journal of the American Medical Association.

Of all leading salad and cooking oils Safflower Oil has the highest ratio of poly-unsaturated fat to saturated fat. Safflower Oil is higher in recommended poly-unsaturates—lower in saturated fat than any other readily available oil or shortening.

When an adjustment in dietary ratio of saturated fat is indicated, Saff-o-life

you should be aware of this new, poly-unsaturated oil for cooking

Safflower Oil makes the substitution easy, appetizing, inexpensive.

Physicians who wish recipes using Saff-o-life Safflower Oil are invited to write directly to: Professional Services Director, General Mills, Inc., Department 120, 9200 Wayzata Blvd., Minneapolis 26, Minnesota.

RATIO OF LINOLEATES* TO SATURATES *poly-unsaturated fats

SAFFLOWER OIL	9.0 to 1.0
CORN OIL	5.3 to 1.0
SOYBEAN OIL	3.5 to 1.0
COTTONSEED OIL	2.0 to 1.0
PEANUT OIL	1.6 to 1.0

A product of General Mills—Your assurance of quality and purity.



The good life—just what the doctor ordered

and sun are both in his doctor's or-
s — so is that grapefruit he's eating
n such gusto. Citrus fruit is a wonder-
way for this patient or any patient to
his daily quota of vitamin C . . . to
oy something good to eat, tasty and
sfying but not rich.

Not all patients are so lucky as to
e retired to Florida, where they can
reach out to pick citrus fruit off their
n orange and grapefruit trees. But any
ent anywhere can get the same bene-
fits of the natural vitamin C in Florida oranges, grapefruit, and tangerines . . . thanks to modern methods of processing fresh fruit. Whether it is frozen, canned, or in cartons, 98% of the vitamin C content of the fruit is preserved.

Grapefruit and other citrus fruits filled with vitamin C are valuable in the nutrition of every age group. Among the teen-agers, vitamin C is one of the two nutrients most often low in the diet. Infants, too, need generous amounts of vitamin C; and they will take it readily when it comes to them in the form of delicious orange juice.

When your patient chooses *Florida* citrus, he can be sure of getting fruit filled with natural goodness and of just the right sweetness. Florida citrus is unexcelled because a State commission watches over the entire Florida citrus crop to see that it meets the world's highest standards for fresh, frozen, canned, or cartoned citrus fruits or juices.

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CONFIDENCE

and well placed too!

The ophthalmologist knows that when he recommends a GUILD OPTICIAN, the service and quality which are a Guild tradition help to make his patient satisfied. He has confidence that his GUILD OPTICIAN will get the job done right.

GUILD Rx OPTICIANS

Guild of Prescription Opticians of Florida



Put your low-back patient back on the payroll

Soma relieves stiffness —stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, *fast!*

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

This was demonstrated by Kestler in a controlled study: average time for full recovery was 11.5 days with Soma, 41 days without Soma. (J.A.M.A. **172**:2039, April 30, 1960.)

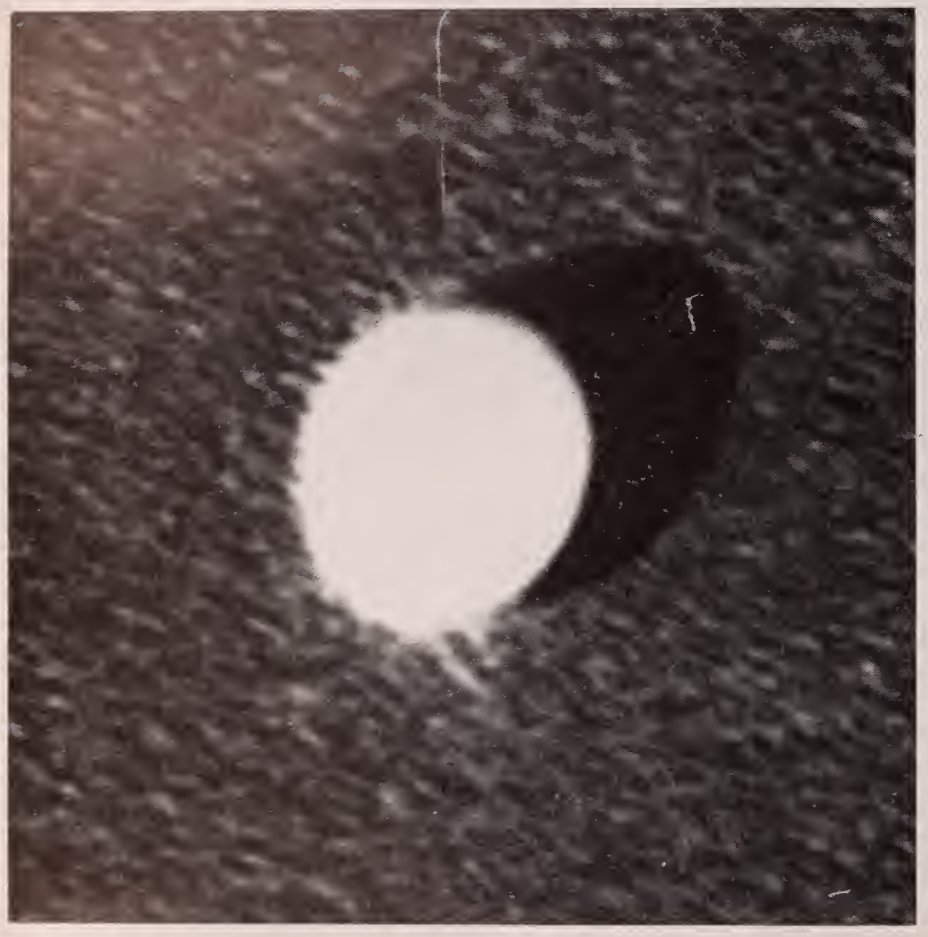
Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets.
USUAL DOSAGE: 1 TABLET Q.I.D.

The muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace)

Wallace Laboratories, Cranbury, New Jersey





Goliath *David*

Against the formidable and ubiquitous Staphylococcus aureus, PANALBA* gives you a powerful weapon. PANALBA is a selective combination of novobiocin (for its unique effectiveness against staph) and tetracycline (for its breadth of coverage). From the outset, your treatment has broader antibacterial coverage resulting from the simultaneous administration of two antibiotics that complement each other. They were carefully chosen for this purpose.

That is why PANALBA offers excellent chances for therapeutic success

Reminder advertisement. Please see package insert for detailed product information.

Upjohn

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RELIEVE THE COLD SUPPRESS THE COUGH WITH NEW

'EMPRAZIL-C'

TABLETS

ANTITUSSIVE ▪ DECONGESTANT ▪ ANALGESIC

Each tablet contains:

Codeine Phosphate*	15 mg.
'Sudafed'® brand Pseudoephedrine Hydrochloride	20 mg.
'Perazil'® brand Chlorcyclizine Hydrochloride	15 mg.
Acetcphenetidin	150 mg.
Aspirin (Acetylsalicylic Acid)	200 mg.
Caffeine	30 mg.

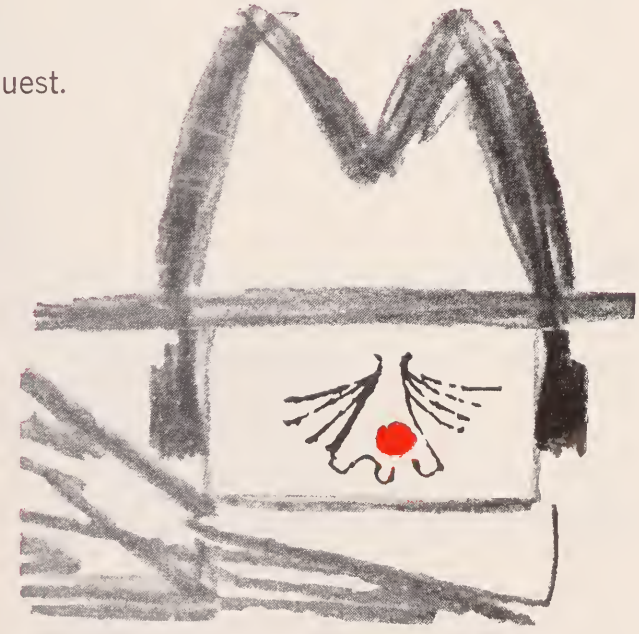
*Warning—may be habit forming.

Complete literature available on request.

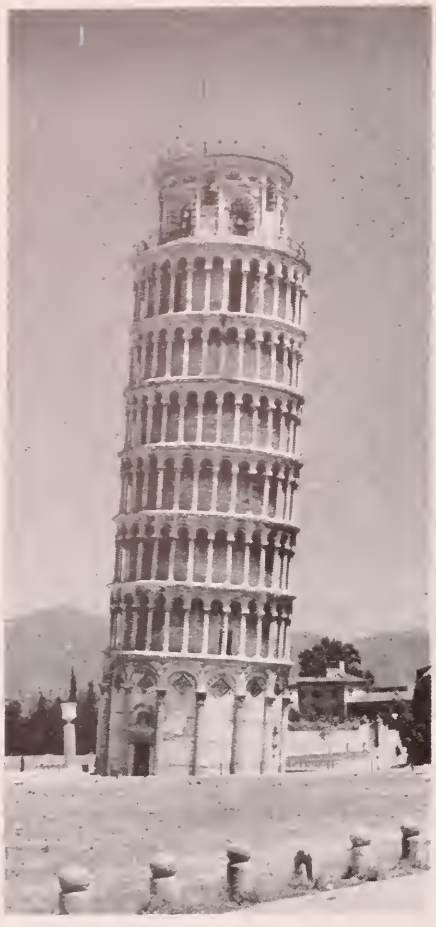
Also available without codeine as

'EMPRAZIL'®

TABLETS



BURROUGHS WELLCOME & CO. (U.S.A.) INC., TUCKAHOE, N.Y.



When treatment for

IMPOTENCE

is indicated

ANDROID T.M. tablets

ANDROGEN-THYROID-COMBINATION

in two convenient dosage forms

ANDROID	ANDROID-H.P. (High Potency)
Each yellow tablet contains:	Each orange tablet contains:
Methyl Testosterone ....2.5 mg.	Methyl Testosterone .....5 mg.
Thyroid Ext. (1/6 gr.) ....10 mg.	Thyroid Ext. (1/2 gr.) ....30 mg.
Glutamic Acid .....50 mg.	Glutamic Acid .....50 mg.
Thiamine HCl .....10 mg.	Thiamine HCl .....10 mg.

INDICATIONS: Impotence in male.

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1. *Methyltestosterone-Thyroid in Treating Impotenee,* A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations,* L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

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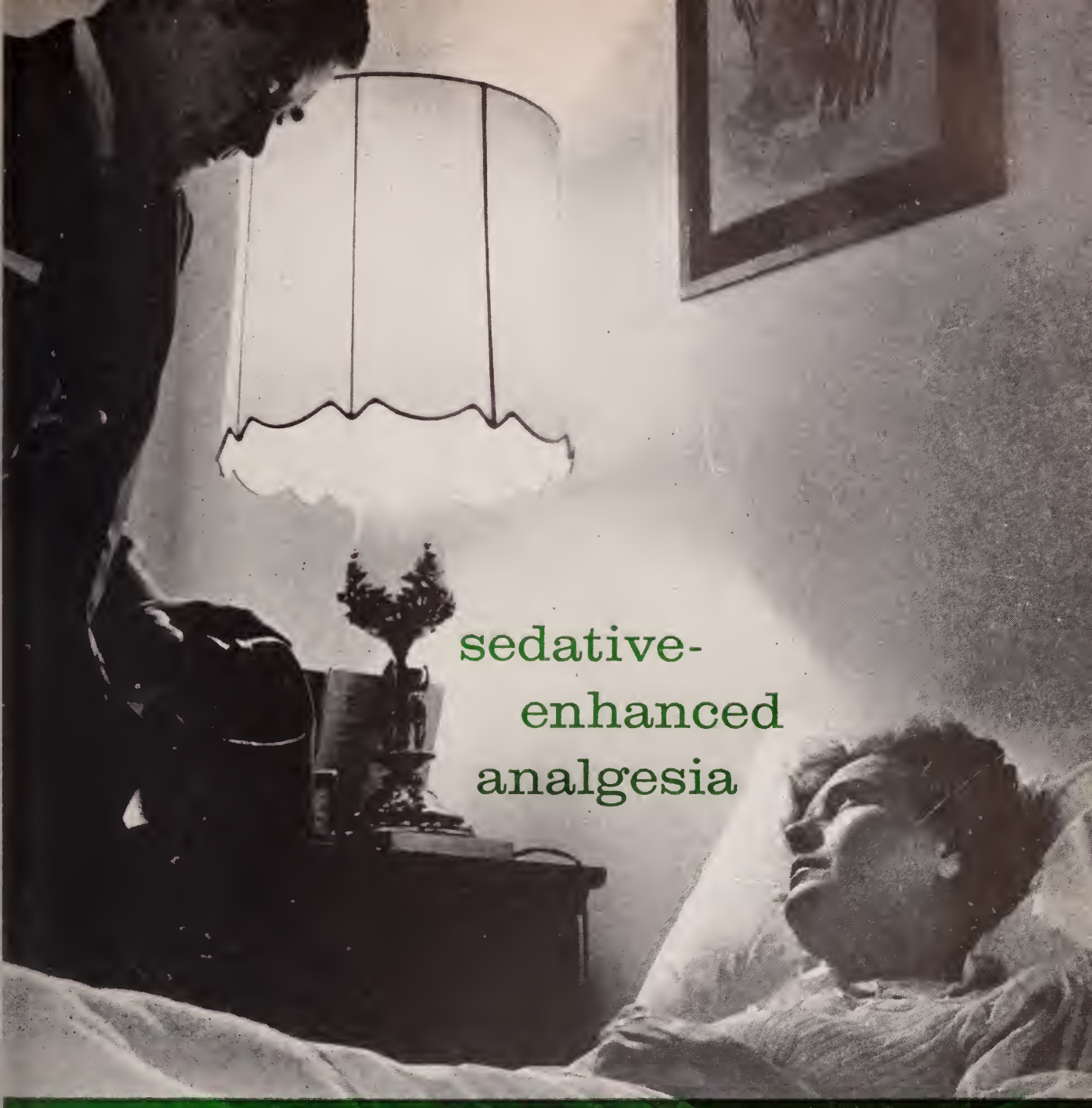
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1. Meyers. G. B.: Ind. Med. & Surg. 26:3, 1957. 2. Murray, R. J.: N. Y. St. J. Med. 53:1867, 1953.

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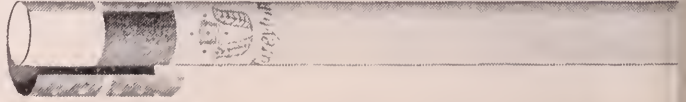
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*Schwartz, I. R.:
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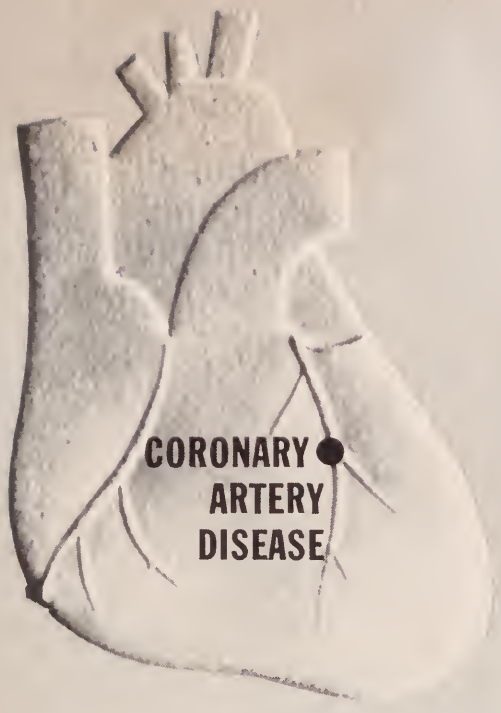
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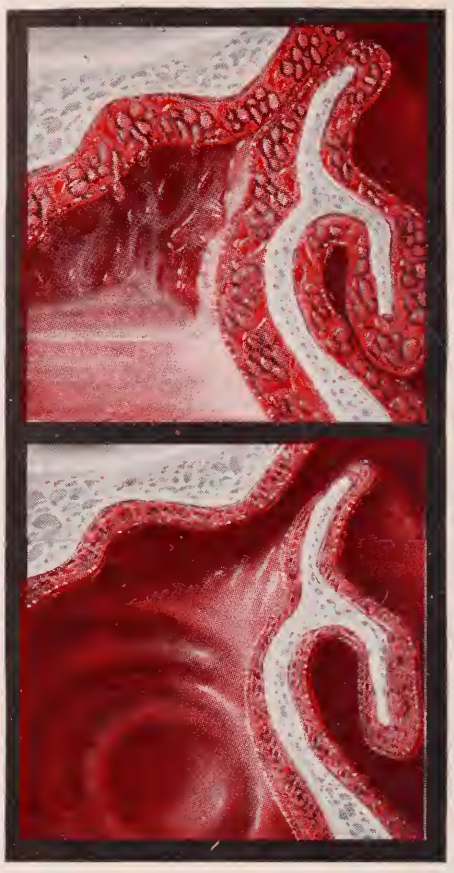
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1. Grant, L. E.: Coryza and nasal sinus infections, **Clin. Med. & Surg.** 42:121, March, 1935. 2. Putney, F. J.: Sinus infection, in Conn, H. F. (Ed.): Current Therapy 1952, Philadelphia, W. B. Saunders Company, 1952, p. 110. 3. Simonton, K. M.: Current treatment of sinusitis, **Journal-Lancet** 79:535, Dec., 1959.

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Volume XLIX, Number 6, December 1962

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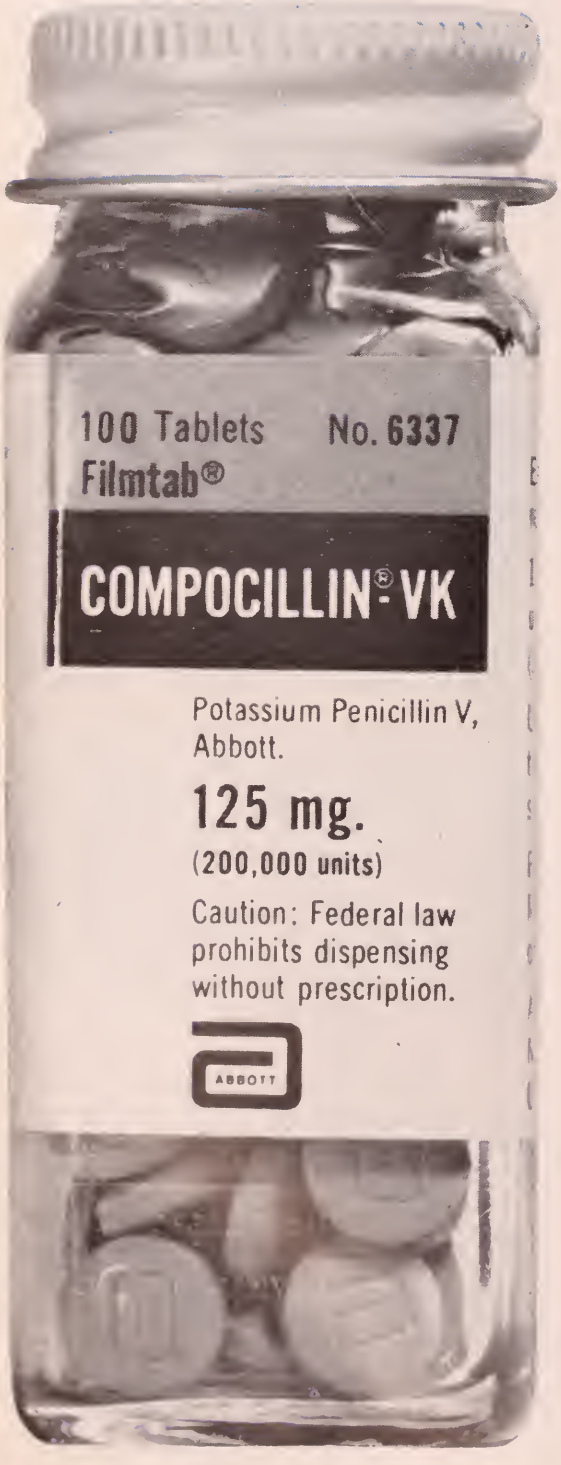
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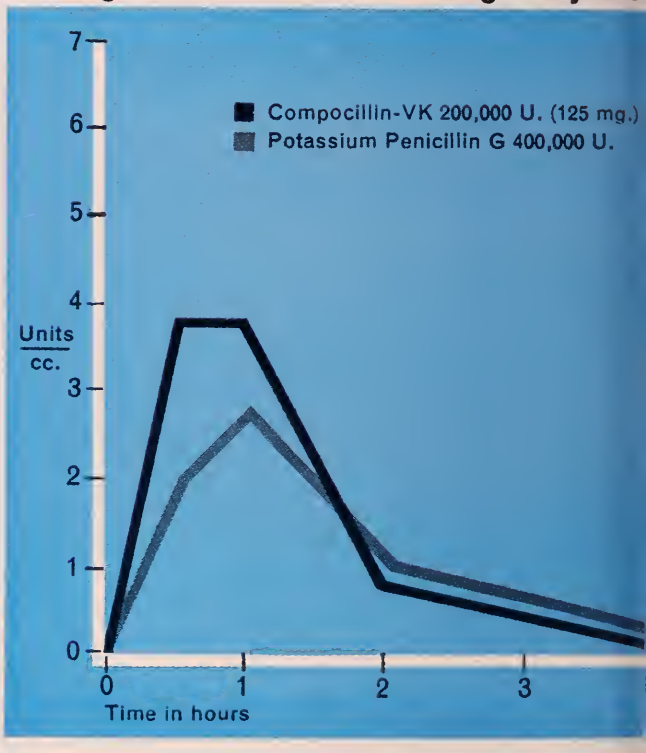
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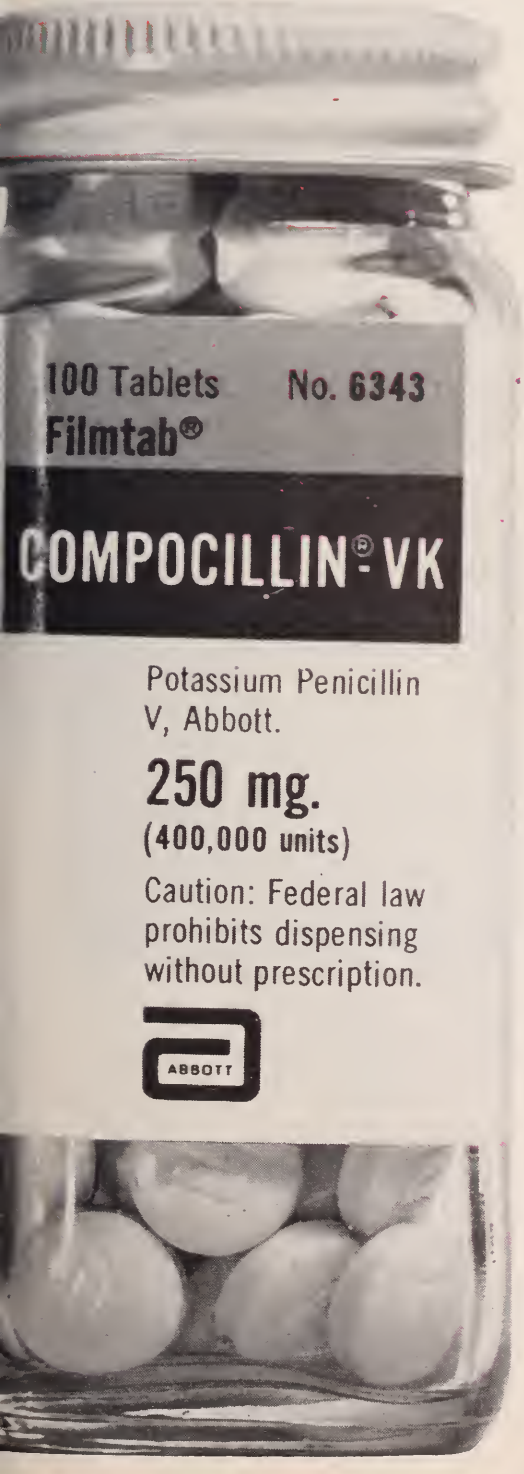


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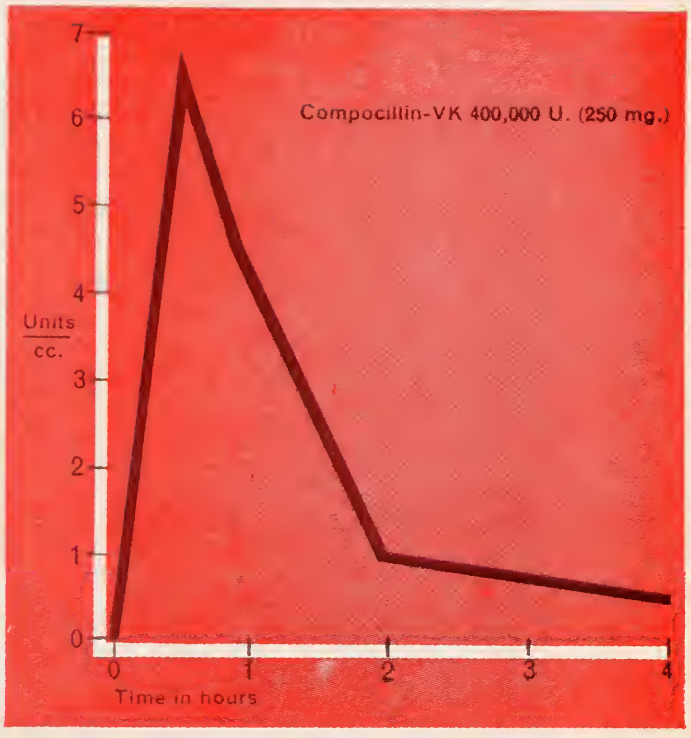
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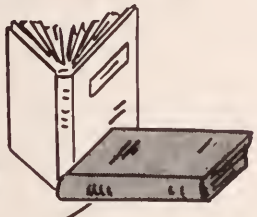
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5. Bentley, M.D.: Journal of the Mich. State Med. Soc. (Sept.) 1959.

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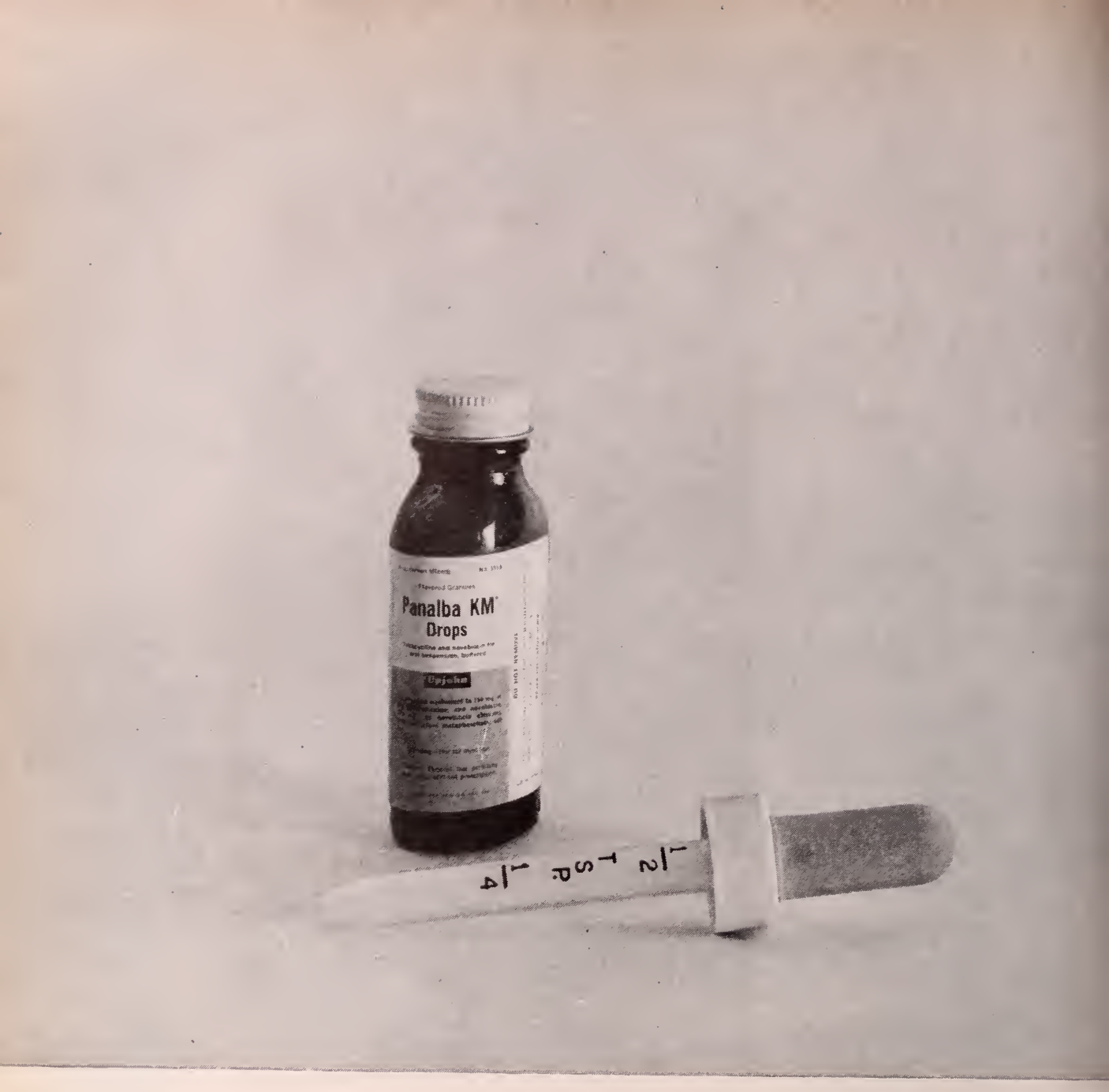
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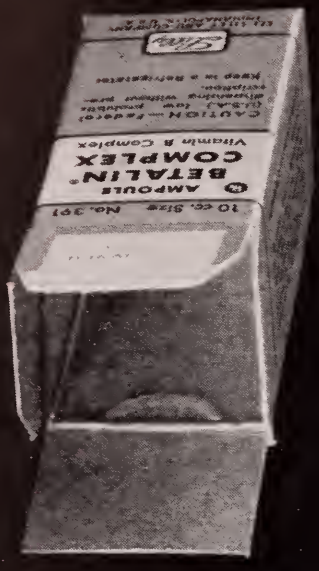
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Clinical Aspects of Tumors of Endocrine Organs in Children

With Emphasis on Genetic Aspects, Systemic Effects, Causative Factors, and Premalignant Conditions

Benjamin H. Landing, M.D.
Los Angeles

Organs which are, or which have been, considered to be endocrine organs, in the sense of producing a circulating "hormone" acting elsewhere in the body, include the pineal gland, the anterior and posterior pituitary glands, the thyroid, the parathyroids, the thymus, the pancreatic islets, the adrenal cortex and medulla, the gonads, the argentaffin cells of the intestinal tract, and the mast cells. The purpose of this presentation is to discuss some of the more important clinical and pathological aspects of the various tumors of these organs in children, and to point out a number of areas where careful studies by practicing physicians can make significant contributions to medical knowledge. Although no single type is common, the tumors of endocrine organs are important because collectively they make up an appreciable fraction of the neoplasms of children, and even more so because of the light they shed on the various ways by which information is transmitted from one organ of the body to another. For this latter reason, the known causative factors, genetic aspects, and systemic effects of endocrine tumors in children will be emphasized, as well as the insight some of these tumors and other "premalignant states" provide on the causes of malignant tumors generally.

Pineal Gland

It has been generally accepted that the sexual precocity associated with pineal tumors is due to a pressure effect on the adjacent hypothalamus, but there is evidence that this explanation is inadequate. Pineal tumors can be divided into two general groups, true pinealomas, which pathologically resemble seminoma-dysgerminoma of the gonads, and a teratoid group, including mixed cell types, embryonal carcinoma and choriocarcinoma. Kitay and Altschule[1] collected information on 178 children with pineal tumors, the majority of which (145) were in boys. Of this group, 46 patients, all boys, had sexual precocity. A significantly higher proportion of the teratoid tumors (36 of 87) than of the true pinealomas (10 of 91) caused precocity, raising the possibility that these tumors act by secreting a gonadotropic hormone, since there is no obvious reason why the hypothalamus should care just which type of pineal tumor is pressing on it. Performance of Aschheim-Zondek or other sensitive pregnancy tests depending on chorionic gonadotropin, on a series of children who might have embryonal carcinomas of the pineal or other sites, would be of great value in providing an answer to this question.

Embryonal carcinoma is the most common malignant component of teratomas in children, and in this sense can be considered a "first cousin" of choriocarcinoma. Thus, the data summarized and still other clues raise the possibility that the unknown "normal" cell corresponding to the cell type of embryonal carcinoma is the Langhans cell, the gonadotropin-secreting cell of the placenta, and secretion of such a "Leydig-cell-stimulating" hormone by the cells of such tumors

From the Department of Pathology and Pediatrics of the Childrens Hospital of Los Angeles and the University of Southern California School of Medicine.
Read before the Florida Medical Association, Eighty-Eighth Annual Meeting, Miami Beach, May 11, 1962.

Table 1. — Thyroid Tumors in Children — Surgical Series 1954-1962

Teratoma (benign)	2
Papillary carcinoma	5*
Follicular carcinoma	2*
Adenoma	3*
Adenoma in goitrous cretin	1
Adenoma with polycystic disease	1
(Nodular chronic thyroiditis	3)

Previous therapeutic radiation to head, neck or mediastinum in five of 10 patients in starred groups.

Table 2. — Data of Duffy and Fitzgerald[2] Carcinoma of Thyroid in Children

	Total	With Pulmonary Metastases
Papillary	15	3
Other types	12	10
Thymic radiation in past	9	

Table 3. — Hyperplastic Goiters in Infants and Older Children

Infants	
Total	8
Clinically hypothyroid	5 + ? 2
Maternal iodide	2
Maternal antithyroid drug	1
Cobalt administration	1
Soybean formula	1
Polycystic disease	1
Older Children	
Total	10
Thyrotoxicosis	7
Cobalt administration	1
Goitrous cretinism	1
Polycystic disease	1

Table 4. — Iodine Content of Formalin-Fixed Thyroid Tumors*

1. Adenoma in goitrous cretin	less than 1 mcg./Gm.	
2. Adenoma	120 " ")	185
3. Adenoma	250 " ")	Average
4. Normal thyroid	340 " ")	Average
5. Normal thyroid	250 " ")	295

*Determinations performed by Dr. O. J. Golub, Bio-Science Laboratories, Los Angeles, Calif.

could explain the apparent restriction of the sexual precocity seen with pineal tumors to boys.

Infundibuloma

The term infundibuloma has been applied to a tumor of the pituitary stalk which is morphologically similar to or identical with the group of piloid astrocytomas occurring along the ventral midline of the brain from optic nerves (optic glioma) to the pons (pontine glioma). Some workers have thought that infundibulomas are composed of the pituicytes of the posterior pituitary, but the fact that they occur in the other sites mentioned, as well as in the cerebellum and pineal region, suggests that this interpretation is incorrect. This tumor may cause posterior pituitary insufficiency, with diabetes insipidus, but has not been observed to cause so-called antidiabetes insipidus (excessive secretion of antidiuretic hormone), so that it would not appear to be a valid endocrine tumor. Since antidiuretic hormone is not made by the posterior pituitary, but in the hypothalamus, this is not surprising.

Anterior Pituitary Gland

For practical purposes, functioning tumors of anterior lobe cells are not seen in children, and statistically this cause need not be considered when a child shows overactivity of one of the target organs. It is important to remember that the pituitary is one of the glands, with the thyroid, adrenals and gonads, at least, for which it is well established that protracted hyperplasia can lead to tumor formation, benign and perhaps eventually malignant. For example, the few children with gigantism my associates and I have studied have had acidophile cell hyperplasia, but not acidophile tumor, as observed in acromegalic adults. In short, the finding of a pituitary tumor in a patient with endocrine dysfunction of long standing does not prove he has always had the tumor, because hyperplasia could have progressed to tumor during the course of the illness.

The pituitary tumor of children is craniopharyngioma, which causes anterior pituitary insufficiency (panhypopituitarism). Some texts distinguish epidermal craniopharyngiomas from adamantinomas, but this is probably a distinction without a difference, since the cell type of craniopharyngioma is the oropharyngeal epithelium, so that the lesion may look more or less like a "true" adamantinoma.

Thyroid Gland

Table 1 lists the thyroid tumors we have seen as surgical specimens in recent years, to illustrate the relative frequency of the various types. The two benign teratomas were both present as large tumors at birth; in neither patient is it certain that any normal thyroid tissue is present. Several of the papillary carcinomas presented as cervical lymph node metastases, illustrating again that so-called lateral aberrant thyroid is usually, if not always, lymph node metastasis from a small primary lesion. Papillary thyroid carcinomas in children are relatively slow-growing tumors, the preferred treatment of which is uncertain. Perhaps the procedure most to be recommended is surgical removal of the thyroid lobe containing the primary

tumor, plus removal of involved nodes, and then full substitution therapy with thyroid hormone, but not radical neck dissection. Radiation therapy seems undesirable because of the suggestive relation of past radiation to thyroid carcinoma in children; thus, five of the 10 patients with adenoma or carcinoma listed in table 1, where no other causative factor can be suggested, had received therapeutic radiation to the thymus, cervical lymph nodes, tonsils or adenoids in the past. Table 2 summarizes the findings of Duffy and Fitzgerald[2] on pulmonary metastases from thyroid carcinoma in children, to illustrate that the prognosis of follicular carcinoma is apparently in general worse than that of papillary carcinoma, and to present again the nature of the evidence that thymic or other radiation in the thyroid region may be a causative factor.

Adenomas in goitrous cretins do not develop until after a number of years of undertreatment, and usually do not appear until the teens. The patient listed in table 1 was 14 when multiple adenomas developed in his chronically hyperplastic thyroid. If the patient is young when the diagnosis is made, adequate thyroid hormone therapy will suppress the pituitary secretion of thyrotropic hormone and arrest the thyroid hyperplasia, but what should be done if the condition is not diagnosed until mental retardation forbids the patient's receiving adequate thyroid hormone without becoming a behavior problem? We are not aware that the maneuver has been employed, but total thyroidectomy would permit the patient to be carried at a socially convenient level of thyroid hormone.

Table 3, for comparison, lists the apparent causes of the hyperplastic goiters we have proved pathologically in the past several years. As can be seen, the majority of infants with hyperplastic goiters are clinically hypothyroid. About half would appear to have hereditary goitrous cretinism, and the other half have been exposed to goitrogenic agents either before or after delivery. The two patients with polycystic disease of the liver and kidneys listed in this table may suggest that a repetitive association of this disorder with thyroid hyperplasia exists, but we have been unable to find any other information on the matter. In older children the most common cause of thyroid hyperplasia is thyrotoxicosis, but about a third have a disorder causing hypothyroidism.

A number of different types of hereditary biochemical abnormality of the thyroid (goitrous cretinism in the broad sense) have been described, resulting from different sites of interruption of the metabolic chain leading from iodide collection by the thyroid, to iodine formation, to iodination of tyrosine, to coupling of iodotyrosines, to secretion of circulating hormones, and finally to deiodination of used hormone. Identification of some of these sites of metabolic abnormality requires special equipment, but some information can be gained from the relatively simple procedure of iodine analysis of thyroid tissue or tumor. Table 4 presents the data on an adenoma of the patient with goitrous cretinism listed in table 1, on two adenomas arising in apparently normal thyroids, and on two control thyroids. Since the tissues were formalin-fixed, the procedure is the equivalent of a protein-bound iodine determination but presumably places the metabolic defect among the metabolic steps prior to coupling of iodotyrosines.

Parathyroid Glands

Both adenoma and primary hyperplasia are very rare in children, and secondary hyperparathyroidism due to renal disease is a much more common cause of osteitis fibrosa. How often the enlarged parathyroids of children with chronic renal disease are palpable merits clinical study.

Thymus Gland

The thymus is probably not a valid endocrine gland, but a few comments about its relation to other organs may be of value. The mechanism of the relation of thymomas or lymphoid hyperplasia of the thymus to myasthenia gravis is obscure. It it important to know that infants born of mothers with myasthenia may have transient myasthenia as newborns, and also that a thymoma may precede the onset of myasthenia by periods up to several years. A patient who has had a thymoma removed thus requires follow-up from several points of view. The mechanism of the association of thymic tumors with hypogammaglobulinemia is also obscure; we are not aware of half-life studies on the globulin to determine whether the protein deficiency is due to some form of hypercatabolism.

Pancreatic Islets

Functioning islet cell tumor is a very rare cause of hypoglycemia in children, and none of the patients who have had subtotal pancreatectomies in our hospital for this disease have been found to have an islet-cell tumor. There is a familial syndrome of chromophobe tumors of the pituitary and tumors of the pancreatic islets

Table 5. — Points About Pheochromocytomas

They may be familial
They may be bilateral or multicentric
They may produce sustained hypertension
They may occur with von Recklinghausen's neurofibromatosis
They may occur with Cushing's disease

Table 6. — Clinical Findings in 17 Cases of Pheochromocytoma in Children (Daeschner, Moyer and Able[4])

Hypertension	17
Nervousness, hyperhidrosis	
Visual disturbances	16 each
Tachycardia	15
Headache	13

Also weight loss, polyuria, polyphagia, high blood sugar, high basal metabolic rate

Table 7. — Urine Patterns In Patients With Neuroblastoma (Voorhess and Gardner[5])

Compound	Pattern			
	1	2	3	4
Dopamine	+	+	—	—
Norepinephrine	+	+	—	—
Metanephrine plus normetanephrine	+	—	+	—
3-Methoxy-4-hydroxymandelic acid (VMA)	+	—	+	—
Epinephrine	—	—	—	—
Number of patients in class	9	3	1	4
Hypertension	4	2	0	1
Diarrhea	2	0	0	0

+ = present
— = not present

Table 8. — Causes of Isosexual Precocity in Children (Wilkins[6])

	Female	Male
Idiopathic precocity	49	11
Central nervous system disease	3	3
Albright syndrome	5	0
Granulosa cell tumor of ovary	1	0
Adrenogenital syndrome	0	20
Masculinizing tumors	0	2
Totals	58	36
Tumors 3/94		

Table 9. — Ovarian Tumors In Children (Gross' Series[7a])

Teratoma	5
Carcinoma	3
Thecoma	2
Granulosa cell tumor	2
Dysgerminoma	1
Arrhenoblastoma	0
Hilar cell tumor	0

Table 10. — Testicular Tumors In Children (Gross' Series[7b])

Embryonal carcinoma	8
Adenocarcinoma	1
Teratoma	1
Seminoma	1
Leydig cell tumor	1

and parathyroids. Patients with this disease often have symptoms by young adult life, and children from such a family should be watched with care, although we do not know of a proved case in a child. The relation of "ulcerogenic tumor of the pancreas" to the familial disorder just mentioned is uncertain, but some if not all patients with the Zollinger-Ellison syndrome would appear to have the familial disease.

Adrenal Cortex

The two main types of adrenal cortical tumors in children, those producing masculinization and those producing Cushing-type hypercorticism, can be distinguished with some reliability by routine microscopic study. Masculinizing tumors tend to have large bizarre cells with opaque cytoplasm and irregular hyperchromatic nuclei, while the others tend to have smaller more regular cells and nuclei with a higher cytoplasmic fat content. The resemblance of the cells of some masculinizing tumors to those in the benign disease called focal anaplasia or cytomegaly of the fetal adrenal cortex is striking, and suggests that the masculinizing adrenal tumors of children are derived from the fetal cortex. The data of Goldstein and his associates, which suggest that the frequency of onset of symptoms of masculinizing tumors declines from birth, also support this idea.[3] There is no microscopic line between cortical adenoma and carcinoma in children, and the data are consistent with the idea that no real difference exists. The cortical tumors are slow-growing, and all may well manifest malignant behavior if untreated long enough.

Cortical tumors may develop in patients with adrenogenital syndrome who reach adult life untreated by steroid hormones, illustrating again the liability of sustained hyperplasia of endocrine glands to progress to tumor formation. It is worth mention that we have also observed familial (in a brother and sister) masculinizing cortical tumor.

Adrenal Medulla

Pheochromocytoma is also rare in children, but a number of points of particular interest are summarized in table 5. That they may have familial occurrence with or without associated neurofibromatosis is of obvious significance, and the ability to produce sustained rather than paroxysmal hypertension can cause difficulty in diagnosis. The rare association with cortical hyperplasia and the clinical picture of Cushing's disease is important, in that a few patients operated on

with the diagnosis of cortical tumor have had catastrophic vascular collapse when the gland was removed. Table 6 summarizes the clinical findings in a series of 17 children with pheochromocytoma collected by Daeschner, Moyer and Able.[4] This list emphasizes the risk of erroneously diagnosing pheochromocytoma as hyperthyroidism, diabetes or renal disease, with delay in treatment until severe brain or kidney damage has occurred.

Recently, there has been interest in the value of determination of the various "catecholamine" derivatives of the medullary hormones, in the diagnosis of both pheochromocytoma and its more embryonic cousin, neuroblastoma. Voorhess and Gardner[5] reported four urine patterns in patients with neuroblastoma (table 7), but their data do not permit one to determine whether the pattern is influenced by medications or injury to the tumor, as by radiation. The literature suggests that diarrhea as a clinical finding is particularly associated with thoracic ganglioneuromas, raising the possibility that pressure on the thoracic duct or sympathetic chain may be a factor in addition to any hormones produced by the tumor. The topic of the mechanism of the various systemic effects of neuroblastomas and ganglioneuromas needs much further study.

Gonads

Before discussing the various gonadal tumors specifically, it is worth pointing out that functioning gonadal tumor is a very rare cause of isosexual precocity in children, as table 8, derived from Wilkins' textbook,[6] demonstrates. In short, although they must be considered, gonadal tumors are not the preferred diagnosis when a child shows isosexual precocity. Masculinization of girls is overwhelmingly due to adrenal tumor or hyperplasia, and true feminization of boys is so rare that a reliable statement as to the most probable cause is difficult.

Ovaries

Gross' series of ovarian tumors[7a] is listed in table 9, to illustrate the general relative frequency of the various types in children, and to emphasize the point, just implied, that masculinizing ovarian tumors are very rare. Granulosa cell tumor and the functioning teratoid tumors cause feminization. It is important to realize that granulosa cell tumor is not restricted to children, but probably occurs at least as often per capita in adults. We have not observed, to our knowledge, a malignant granulosa cell tumor in a child, but as a class these tumors are slow-moving, so that a long period may elapse between the original manifestations and metastases. Actually, the long term prognosis of granulosa cell tumor in children is probably not known, and follow-up studies of such patients are much to be desired.

A rare ovarian tumor of particular endocrine interest is gonadoblastoma. As far as we can determine, all patients reported with gonadoblastoma have had Turner's syndrome or some other form of gonadal dysgenesis. The data are compatible with the belief that gonadoblastoma results from the sustained effect of elevated levels of pituitary gonadotropin on a genital ridge incapable of the normal hormonal response to gonadotropin. It may thus be that patients with gonadal dysgenesis have an abnormality of steroid synthesis in addition to their anatomic gonadal abnormality. Gonadoblastoma is of further interest in that it is often bilateral, and sometimes shows enough focal calcification to be visible by x-ray.

Testes

For comparison with table 9, Gross' series of testicular tumors[7b] is presented in table 10. As with the ovary, the teratoid tumors form the largest class. Tumors which we believe to be Leydig cell tumors develop in the testes of males with adrenogenital syndrome, apparently another example of chronic hyperplasia progressing to tumor formation. Some of these have been reported as tumors of ectopic adrenal cells, and although we think this is not the correct explanation, there is no obvious way to settle the issue, because the genetically determined abnormality of steroid synthesis prevents application of the usual criteria based on the chemical nature of the steroids produced. Tumors of the testis also develop in the gonads of patients with hereditary male pseudohermaphroditism, the feminizing testis syndrome. We have recently seen an adult with this disease who had bilateral seminoma, the first of which to appear was called dysgerminoma because it was not realized that the patient was chromatin-negative. The high liability of patients with male pseudohermaphroditism to gonadal tumor development requires that they be followed closely, and perhaps be "castrated" after they feminize at puberty.

Argentaffin Cells

The malignant carcinoid syndrome of facial telangiectasia, episodic flushing and cyanosis, hyperperistalsis with diarrhea, episodic bron-

choconstriction ("asthma"), variable hypertension, and right heart and pulmonary arterial sclerosing lesions has received much attention in the recent literature. In children, we see primary carcinoid tumor in 1/500 to 1/1,000 appendectomies, and even more rarely as an incidental finding in the small intestine of teen-agers. Like granulosa cell tumor, carcinoids are of low grade malignancy, and it would appear to take many years for a patient to acquire a large enough mass of metastatic tumor to have "serotonin poisoning." This apparently explains the lack of cases of full-blown malignant carcinoid disease in children; the youngest patient we have seen was 19. With the reservation that certain drugs and foods can influence the urine findings, diagnosis can be aided by demonstration of 5-hydroxy indolacetic acid and other serotonin metabolites in the urine.

Table 11. — Diseases With Hereditary Occurrence of Tumors In Endocrine Organs

1. Syndrome of adenomas of pituitary, parathyroids and pancreatic islets (? = ulcerogenic tumor of pancreas)
2. Goitrous cretinism (thyroid adenomas)
3. Adrenogenital syndrome (Leydig cell nodules of testes; adrenal cortical tumors in adult life)
4. Adrenal cortical tumor not arising from chronic hyperplasia (rare)
5. Pheochromocytoma, with and without neurofibromatosis
6. Male pseudohermaphroditism (seminoma, and ? teratoid tumors)

Mast Cells

Mast cells produce heparin and histamine, but probably not serotonin, in humans, and the mast cell tumors of humans, variously called urticaria pigmentosa, mastocytosis, and mast cell leukemia, may produce bleeding tendency and dermatographism, in addition to infiltration of various organs by mast cells. One infant with generalized mastocytosis whom we studied did not have heparinuria, and the evidence that the mast cell tumors really deserve to be considered endocrine tumors is scant.

Table 12. — Reported Hormonal Syndromes Produced By Tumors of Nonendocrine Cell Types

Manifestation	Hormone Involved	Types Of Tumors
Hypoglycemia	Insulin	Sarcomas of trunk
Serotonin intoxication	Serotonin	Bronchial adenoma
Cushing's syndrome	? Steroids or ACTH	Carcinoma of lung, bladder, prostate, etc.
Sexual precocity	Gonadotropin	Liver tumor
Bone lesions	? Parathormone	Liver tumors
Polycythemia	? Erythropoietin	Tumors of kidney, brain

Table 13. — Hereditary Neoplasms Of Other Than Endocrine Organs

Condition	Malignancy Occurs
von Recklinghausen's neurofibromatosis	+
Multiple polyposis of colon	+
Multiple exostoses (osteochondromas)	+
Peutz-Jeghers syndrome (intestinal polyposis, buccal pigmentation, etc.)	? —
Gardner syndrome (leontiasis ossea, intestinal polyposis, etc.)	+
Retinoblastoma	+
Tuberose sclerosis (epiloia)	+
Trichoepithelioma	+
von Hippel-Lindau cerebelloretinal angiomatosis	? —

As can be seen from this survey of endocrine organ tumors in children, many things remain to be learned about these lesions, and much to advance knowledge can be done by practicing physicians without elaborate laboratory facilities. It is also obvious that there are many genetic im-

Table 14. — Premalignant Lesions In Children[8]

A. Condition	Tumor
Polyposis of colon	Carcinoma of colon
Chronic ulcerative colitis	Carcinoma of colon
Caustic esophageal stricture	Carcinoma of esophagus
Congenital lung cysts	Carcinoma of lung
Tracheobronchial rests in esophagus	Carcinoma of esophagus
Burn scars	Carcinoma of skin
Radiation dermatitis	Carcinoma of skin
Virginal hypertrophy of breast	Mammary carcinoma
Aberrant breast tissue	Mammary carcinoma
Persistent prepuce	Carcinoma of penis
Cryptorchidism	Testicular tumors
Teratomas	Embryonal carcinoma and choriocarcinoma
B. Other sites of radiation	Osteogenic sarcoma
	Carcinoma of thyroid
Large pigmented nevi ("bathing-trunk" nevus)	Malignant melanoma

plications of these tumors, and that demonstration of a number of these lesions requires the physician to make certain investigations of, and to offer appropriate counseling to, other members of the family. Table 11 lists the better known situations in which there is hereditary occurrence of tumors of endocrine organs.

Hormonal Effects of Other Tumors

There has, recently, been much interest in hormonal effects from tumors not ordinarily thought of as endocrine tumors, and one can even wonder whether all tumors may not have some humoral effects on the rest of the body. Table 12 lists a number of endocrine disorders which have been reported to result from various types of tumors, and the proved or presumed hormone involved. Since, as far as we know, all cells in the body have the same genetic information, production of hormones by cell types which do not normally produce them may not really be too surprising. Our present concept of neoplasia implies a disturbance of the mechanisms normally controlling cell proliferation and differentiation, and it seems reasonable that this disorder of regulation may on occasion involve other cell properties than simply proliferation. This discussion implies that the behavior of cells is largely controlled by their genes, and this would appear to be true, in that the genes provide the information for construction of a biochemical background, within which the cells have some "freedom of operation" as directed by controlling influences like hormones. This being so, it is not surprising that there are, in addition to the endocrine tumors listed, a number of tumors which are genetically determined, and therefore hereditary. The better known ones are listed in table 13. Demonstration of any of these conditions in a patient has obvious implications to the members of the family, and it is the duty of the physician to proceed with appropriate studies and recommendations.

Repeatedly in the foregoing discussion, chronic hyperplasia of endocrine organ cells has been considered a cause of tumor formation, although the mode of transformation of the involved cells from one behavior pattern to another remains uncertain. It is perhaps not too remote from the subject of this discussion to point out that many other "premalignant" situations occur in children, and that there are mechanisms of carcinogenesis other than chronic hyperplasia. Table 14 lists in group A the premalignant lesions in children compiled by Richardson,[8] and in group B, some additional conditions we would add to the list.

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Aneurysm of the Abdominal Aorta

The Hazard of Watchful Waiting

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TAMPA

The following paragraph was taken from an article appearing in a local Florida newspaper: "The body of Mr. X, 63 years old, a prominent Floridian, was returned Sunday to his home for services and burial. Mr. X and his wife had spent Friday night in a motel at an out-of-state resort. Mr. X was stricken Saturday morning when a large blood vessel in his abdomen ruptured. He died at 10:15 p.m. in the hospital there."

Mr. X obviously died from a ruptured aneurysm of the abdominal aorta. Such an article very likely receives little attention from the majority of physicians, but the vascular surgeon pauses and wonders if Mr. X might have been saved. We were stimulated to publish this paper as a result of these thoughts.

Since the vast majority of aneurysms of the abdominal aorta are due to arteriosclerosis, as man lives longer, it is logical to assume that aneurysms will occur with increasing frequency. There have been a number of studies[1-4] in regard to this subject, but the true incidence of abdominal aortic aneurysm is difficult to ascertain because of sampling differences. For example, Wright, Urdaneta and Wright[2] reported a clinical incidence of .05 per cent for all admissions to the New York Hospital from 1945 through 1955, while an autopsy study by Brindley and Stembridge[1] revealed an incidence of 0.43 per cent. Since the life expectancy of the patient with an untreated aneurysm is so poor,[1-3] and since surgical resection and grafting can usually be accomplished with an acceptable mortality rate, it behooves us as physicians to diagnose abdominal aortic aneurysms and urge treatment when possible.

Diagnosis

The diagnosis of an aneurysm of the abdominal aorta can be made in the vast majority of cases by physicial examination. Typically, one finds a pulsatile mass in the epigastrium which extends to or just below the umbilicus. It will present more frequently to the left than to the right of the midline, and as it enlarges, it will extend beyond the umbilicus to the lower quadrants. In the majority of cases there is calcification in the wall of the aneurysm, and x-rays of the abdomen, particularly in the lateral and oblique projections, will confirm the diagnosis. The small asymptomatic noncalcified aneurysm will undoubtedly be overlooked, particularly in the obese person. Conversely, the abdominal aorta of a slender female may be so readily palpable because of increased lumbar lordosis that in cases where a lateral bowing of the aorta has occurred owing to elongation from arteriosclerosis, one may make an erroneous diagnosis. Rarely, one encounters a patient with a congenitally high bifurcation of the abdominal aorta which is misleading because lateral pulsations of the iliac arteries will be felt well above the umbilicus. In the latter two situations and in the obese patient with undiagnosed abdominal and back pain, aortography is indicated. Early in our experience, translumbar aortography was frequently used to verify the diagnosis of an abdominal aortic aneurysm and to determine its resectability. Although we have had no mortality or significant morbidity in our experience and in conjunction with the radiologists in over 400 translumbar aortograms, we prefer to limit this procedure in general to the situations mentioned for the following reasons:

(1) The overwhelming majority of aneurysms of the abdominal aorta arise distal to the renal arteries and are resectable.
(2) If there is a thrombus in the wall, which there usually is, aortography may not demonstrate the extent of the aneurysm.
(3) There is a small but definite risk with translumbar aortography.

The patient's history is always important in establishing a diagnosis, but it is helpful only

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from the negative aspect in the case of the non-expanding abdominal aneurysm. When pain occurs, one can assume that the aneurysm is either expanding or in the process of rupturing. The pain is typically epigastric and frequently will radiate posteriorly to the lower thoracic or upper lumbar region. With a large aneurysm there may be vague gastrointestinal symptoms due to partial duodenal obstruction from displacement in the region of the ligament of Treitz. Once rupture occurs, the pain becomes excruciating and is followed by shock. The time interval from rupture until death depends upon whether the rupture is intraperitoneal or retroperitoneal. There is usually adequate time to move the patient to the hospital in preparation for operation provided there are no needless delays. Aortography is not indicated when rupture is suspected, for the delay may preclude survival of the patient.

Surgery

Since March 1958, we have routinely utilized moderate hypothermia without precooling. Body temperature is usually maintained during the operation at 90 to 92 F. This temperature has decreased the tendency for postoperative oliguria, and older patients withstand the operation better. Rewarming is started as the abdominal incision is being closed. It is advisable to include the femoral areas in the operative field so that pulses can be examined during closure. We have found transparent Vi-drape to be convenient. The skin is prepared in the usual manner from the nipple line to the knees. A long midline incision is employed extending from the xiphoid to the symphysis pubis, skirting the umbilicus. The abdominal cavity is explored, and one can usually establish within a few minutes if the aneurysm is resectable. When possible, the bifurcation of the aorta should be preserved and a tube-type rather than a bifurcation prosthesis inserted for the following reasons:

(1) Two suture lines instead of three save time.
(2) The anastomosis is technically easier.
(3) The possibility of kinking of the limbs of the prosthesis is less and will decrease the tendency toward late thrombosis.

We prefer the woven Teflon prosthesis after past experiences with homografts, nylon and dacron. Mersilene has proved to be a superior arterial suture and is used in preference to silk because of its added strength. Heparin is routinely used during the operation but not during the postoperative period. It is injected as a dilute solution into the abdominal aorta prior to cross clamping. After occlusion an additional injection is made proximal to the aortic clamp. A final injection is made through small catheters into the iliac arteries prior to completion of the distal anastomosis. We routinely use 25 units of heparin in 50 cc. of saline, and a portion of this solution is injected in each of the regions described. Rarely is it necessary to use more than a total 50 cc. The surgical technique employed with asymptomatic and expanding aneurysms differs little from that utilized with the ruptured aneurysm except for the necessity of speed in controlling hemorrhage in the latter situation.

Intensive care during the early postoperative period is mandatory. Fluid and electrolyte balance must be watched carefully. Ileus persists from three to five days, and constant gastric suction must be maintained during this period. Most vascular surgeons, including our group, continue to use prophylactic antibiotics because an infected graft will result in disruption of the suture line and usually death. The patients are allowed out of bed on the third to fifth postoperative day. They are advised against any heavy lifting for three months.

Results

From 1955 to the present, we have operated on 55 patients with abdominal aortic aneurysms and have been able to resect and graft the aneurysm in 49 of these patients. The operated lesions have been classified as (1) asymptomatic, (2) expanding and (3) ruptured. The term "expanding aneurysm" has been used by Szilagyi, Smith, Macksood and Whitcomb[5] to denote an aneurysm with symptoms but without rupture. We have elected to classify the aneurysms in our cases in a similar manner.

We have resected and grafted 20 asymptomatic abdominal aortic aneurysms with no operative mortality (table 1). The ages of the patients ranged from 55 years to 77 years, and the two oldest living survivors are now 80 years of age. There were 18 males and two females in this group. Sixteen patients were normotensive, and four patients had moderate hypertension. All were considered reasonably good operative risks.

There were 17 patients with expanding abdominal aortic aneurysms. The ages in this group varied from 57 years to 72 years. Fifteen patients were males and two patients were females. Seven of the group were known hypertensives. We re-

sected and grafted the aneurysm in all of these patients with an operative mortality of 29 per cent. One death (table 2) was due to staphylococcus infection resulting in disruption of the suture line and an aortoduodenal fistula 13 days after the initial grafting. The patient was again subjected to operation, the fistula closed, and a new prosthesis inserted, but death occurred three days later. The source of infection was subsequently traced to a carrier in the operating room. Two patients died from renal failure on the fourth postoperative day. Both patients were hypertensive, had arteriosclerotic heart disease and were considered the poorest risks in this group. One patient died 15 days after grafting from an acute myocardial infarction. The fifth patient died from thrombosis of the prosthesis on the twelfth postoperative day. At operation both iliac and femoral arteries were found to be thrombosed with poor distal flow-off, and this condition resulted in the graft failure.

In 12 patients ruptured abdominal aortic aneurysms were resected and grafted as emergency procedures. This group consisted of 11 males and one female with ages varying from 63 years to 70 years. Four patients were known hypertensives. In the majority of cases, however, the preoperative status was not well known. There were eight deaths in this group (table 3). Three patients died from renal failure with death occurring three, five and 18 days postoperatively. One patient died from an acute myocardial infarction 24 hours after operation, and another patient died from acute cardiac failure eight hours after operation. One patient died from a pulmonary embolus on the fourth postoperative day. The remaining two patients died in irreversible shock four hours and 48 hours after operation. In the latter case, the patient had been anuric for 18 hours and in shock for six hours prior to operation. In six of the eight fatal cases, the rupture was intraperitoneal while in the remaining two cases it was retroperitoneal. In the four cases with survival the rupture was retroperitoneal in three and intraperitoneal in one.

We have operated on 16 patients with ruptured abdominal aortic aneurysms and were able to resect the aneurysm in only 12 of them (table 4). In three of the four cases with exploration only, the aneurysms extended either above the celiac axis or the renal arteries and were not resectable. In the fourth case the patient died from uncontrollable hemorrhage as the result of intraperitoneal rupture, even though proximal control had been accomplished through the chest. Four patients with ruptured abdominal aortic aneurysms were not operated on. Two of these patients died in the emergency room before they could be moved to the operating room. The family declined operation for the third patient, and the surgeons declined to operate on the fourth patient. In the latter case, the patient had been anuric for 36 hours, and his general condition was poor. Two additional patients not listed had nonruptured aneurysms extending above the celiac axis which were not resectable.

Discussion

The survival rates for untreated aneurysms of the abdominal aorta have now been reasonably well established.[1-3,6] Estes,[1] whose series is so frequently quoted, stated that of 102 patients studied with untreated abdominal aortic aneurysms, 50 per cent had died within three years of detection of the aneurysm and 75 per cent were dead within five years. In their study of 68 untreated patients, Wright and his associates[2] stated that only 29 per cent were alive at the end of two years and 95 per cent of them were dead at the end of five years. They further stated that these statistics indicate a prognosis comparable to that for many forms of cancer. The survival rates for patients with resected aneurysms of the abdominal aorta are also now well documented.[6,7] Sixty-two per cent of the patients subjected to resection reported by the combined Baylor and University of Pennsylvania groups survived five years while for those with an unresected aneurysm the survival rate was 10 per cent. Actuarial tables show a 68 per cent five year survival rate for normal 61 year old white males. Thus we have a sound basis for recommending surgical treatment for patients with abdominal aortic aneurysms,[8] and the only question that arises is whether another disease process should contraindicate resection.[9]

Many physicians seem to be in a dilemma as to which patients are candidates for surgical therapy. The usual reasons for deferring operation are evidence of vascular disease elsewhere and the erroneous impression that a small aneurysm will not rupture. All patients with abdominal aortic aneurysms should be operated on unless there is evidence of severe cerebral arteriosclerosis or significant cardiac or renal disease. Then one must decide whether the patient is more likely to

die from another cause than he is from the aneurysm.

Evaluation of the vascular status of these patients may be difficult since most people in this age group have some degree of coronary arteriosclerosis, but it is significant that in our series only one patient with an unruptured aneurysm died as a result of cardiac disease. On the other hand, severe coronary artery disease and frank cardiac failure are contraindications to elective surgery. In the case of renal disease the physician may face an equally difficult decision. Postoperative renal failure is one of the dreaded complications of abdominal aortic surgery. Blood urea nitrogen determinations and phenolsulfonphthalein renal function studies are routinely performed preoperatively, and one should be reluctant to advise operation for the asymptomatic aneurysm with evidence of poor renal function.

Several precautions can be taken during operation to protect the kidneys. We think that moderate hypothermia has definitely reduced the tendency for postoperative oliguria. It is not necessary to precool patients, and in this manner it is possible to use a hypothermia mattress in all cases including those of emergency ruptured aneurysm. It is also our belief that most cases of postoperative renal failure probably result from thrombus, or occasionally atheromatous plaques, being dislodged into the renal arteries during operation. We routinely inject dilute heparin solution as previously described into the proximal aorta after cross clamping to prevent thrombus formation. Periodic release of the proximal clamp to flush the aorta is also advisable. We have not found it necessary to use mannitol or to inject the adventitia of the proximal aorta or renal arteries with procaine as advocated by some. It is also important to maintain systemic blood pressure with blood and/or vasopressor drugs as the aortic clamp is being released to prevent renal and myocardial ischemia. Severe peripheral vascular disease may present technical difficulty for the surgeon, but the loss of a limb is less of a sacrifice than the loss of a life. We have been fortunate in that we have lost only one extremity in our series, and this was during our early operative experiences.

The argument that a small aneurysm does not need to be resected is not a sound one. Although the small aneurysm is less likely to rupture according to autopsy studies,[4] no one can predict with any certainty which aneurysms will rupture. Once rupture occurs, the operative mortality jumps 50 to 60 per cent (table 5).[5-7,10] The high mortality rate results from technical difficulties plus other often overlooked factors. The operation frequently must be performed at night as an emergency procedure, and the patient is less likely to tolerate formidable aortic surgical therapy after massive hemorrhage and a period of hypotension. By contrast, we have had no operative mortality with elective resection of the asymptomatic aneurysm.

Table 1.—Resected Abdominal Aortic Aneurysm Operative Mortality

	Number	Deaths	
Asymptomatic (Ages 55-77 yrs.)	20	0	0%
Expanding (Ages 57-72 yrs.)	17	5	29%
Ruptured (Ages 63-70 yrs.)	12	8	67%

Table 2.—Causes of Death in 17 Cases of Resected Expanding Aneurysm

	Number
Staphylococcus infection	1
Renal failure	2
Acute myocardial infarction	1
Thrombosis of graft	1
Total	5

Table 3.—Causes of Death in 12 Cases of Resected Ruptured Aneurysm

	Number
Renal failure	3
Acute myocardial infarction	1
Acute cardiac failure	1
Pulmonary embolus	1
Irreversible shock	2
Total	8

Table 4.—Ruptured Abdominal Aortic Aneurysm Mortality

	Number	Deaths	
Resected	12	8	67%
Explored only	4	4	100%
No operation	4	4	100%

Table 5.—Mortality Rate of Resected Abdominal Aortic Aneurysms (Collected Series)

	Asymptomatic	Expanding	Ruptured
Szilagyi et al.[5] 1961	19%	27%	51%
Connar et al. 1962	0%	29%	67%
DeBakey et al.[7] 1957	8%		33%
Gryska et al.[10] 1961	9.6%		58%
MacVaugh et al.[6] 1961	11%		85%

Summary

In summary, all abdominal aortic aneurysms should be resected and grafted if there is a rea-

sonable chance of the patient surviving the operation. When one evaluates statistics of long term survival of the untreated group of patients versus the operative mortality and long term survival of the group undergoing resection of the aneurysm, the hazard of watchful waiting is very real.

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The Management of Digitalis, Quinidine and Procaine Amide Intoxication

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A fundamental responsibility of the physician is to do no harm. Most physicians actively attempt to aid the patient in his physiological adjustment to disease. It is somewhat paradoxical that in the pursuit of this latter objective a basic responsibility is frequently violated.

There appears to be an alarming increase in the incidence of toxicity from the drugs in common use today in the treatment of heart disease. Patient response to these agents is often subtle and therapeutic responses occasionally uncertain. Many of these drugs have considerable toxicity, since their beneficial effects evolve from alterations in such basic properties of heart muscle as rhythmicity, contractility, excitability and impulse conduction.

The purpose of this paper is to discuss the diagnosis and management of digitalis, quinidine and procaine amide intoxication. By doing so, it is hoped that unnecessary combinations of potent drugs will be avoided and the necessity for continuing the use of a potentially dangerous medication will be continually questioned in a given patient.

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Digitalis

For many years, digitalis glycosides have been the most important of the drugs used in the management of heart failure. In addition, even in the absence of cardiac decompensation, many supraventricular arrhythmias respond favorably to the administration of digitalis.

In spite of a vast clinical experience in the use of cardiac glycosides, there is evidence suggesting that digitalis intoxication is increasing. Indeed, it has been reported that in one out of every five to seven hospital patients receiving digitalis cardiotoxicity develops.[1]

One asks why should this be? In part, the increased use of the purified cardiac glycosides plays a role. To some extent, however, this increase in digitalis intoxication results from rapid advances in many fields of medicine enabling patients with advanced heart disease to live longer. The more seriously damaged the heart the narrower the therapeutic-toxic ratio of digitalis.

The manifestations of digitalis intoxication are protean. Nearly every known disorder of the heart beat has been observed with digitalis cardiotoxicity. In addition to electrocardiographic abnormalities, the physician must be aware of other

clinical signs and symptoms. These include alterations in personality, mild anorexia at the sight rather than the thought of food, and various neurological and endocrinological abnormalities. Visual disturbances are classical indications of digitalis overdosage; yet these, too, are frequently overlooked.

Certain disorders of the heart beat are frequently associated with toxic doses of digitalis.[1,2] These include multifocal, paired or coupled (bigeminy) premature ventricular contractions, varying degrees of A-V heart block, A-V dissociation with and without interference, paroxysmal auricular tachycardia with block and ventricular tachycardia. In particular, bi-directional ventricular tachycardia is almost pathognomonic of digitalis poisoning.

While the full digitalizing dose with any digitalis preparation varies from individual to individual, it appears that all the digitalis glycosides have approximately the same therapeutic to toxic ratio.

No single etiologic type of heart disease has consistently demonstrated decreased tolerance to digitalis. There is evidence, however, to support the observation that in patients with chronic cor pulmonale with hypoxia digitalis intoxication frequently develops.[3] Several other predisposing and precipitating factors must be considered in determining the amount of a given glycoside necessary for digitalization, augmentation and maintenance. These include acute myocardial infarction, rheumatic and other forms of myocarditis, renal and hepatic failure and cerebral vascular accidents.[1] Potassium depletion, frequently and insidiously complicating the use of potent oral diuretic preparations, is perhaps the most common of the factors precipitating digitalis cardiotoxicity. In a review of one year's experience in a general medical hospital,[1] digitalis cardiotoxicity developed in almost 70 per cent of the patients within 72 hours of sudden and significant diuresis. Adequate digitalization, therefore, remains an art, dependent on careful evaluation of each of the many factors modifying dosage in the given patient.

Because the problems relating to optimal utilization of digitalis are complex and the risks of overdosage serious, familiarity with treatment of digitalis poisoning is mandatory. The first step in the management of digitalis cardiotoxicity must be a continual high index of suspicion. In ambulatory patients on digitalis, careful inquiry should be made to uncover subtle changes in personality, appetite and vision. Early signs of congestive heart failure, however, frequently present as insomnia, restlessness, anorexia or vague abdominal distress; these symptoms are unfortunately shared by patients with early digitalis overdose. If the patients have symptoms suggesting digitalis overdose without evidence of a cardiac arrhythmia, the dose of digitalis should be either reduced or entirely discontinued. In a patient also receiving a thiazide preparation, oral potassium, 2-4 Gm. daily in divided doses, in either liquid or tablet form can also be given. If a minor or "benign" arrhythmia is present such as occasional PVC's or brief runs of bigeminy, digitalis must be promptly discontinued and the patient started on oral potassium therapy. It must be appreciated that bigeminy may indicate that 75 per cent of the lethal dose of digitalis has been administered.[4]

In the presence of a more serious arrhythmia such as PAT with block, A-V dissociation or ventricular tachycardia, immediate hospitalization is indicated for parenteral potassium therapy. In this regard it may not be appreciated that severe potassium depletion with concomitant digitalis sensitivity can exist in the face of a normal or slightly decreased serum potassium level.

Potassium therapy itself is potentially dangerous. One must determine whether renal function is compromised in the digitalis-intoxicated patient. Should impaired renal function exist, oral potassium salts which would normally be well tolerated may result in serious potassium cardiotoxicity and occasionally death. In advanced digitalis intoxication the cellular "potassium pump" may be so depressed that the heart may develop exquisite sensitivity to exogenous potassium. When one is using potassium, the danger of the occasional synergistic effect of digitalis and potassium in depressing A-V junctional tissue should also be recalled.

In those arrhythmias necessitating hospitalization, potassium chloride (80 mEq. in 1,000 cc. of 5 per cent dextrose in water) should be administered slowly (no more than 40 mEq./hr.) with continuous electrocardiographic monitoring. It cannot be overemphasized that during this infusion continuous monitoring with an electrocardiograph is of paramount importance; the transition from digitalis intoxication to an advanced stage of potassium cardiotoxicity may occur rapidly.

It may frequently be difficult to determine when the potassium infusion should be stopped, particularly if the digitalis-induced arrhythmia

persists. In the presence of an adequate urinary output as much as 120 mEq. of potassium can be infused in three to four hours without producing electrocardiographic signs of potassium intoxication. Potassium cardiotoxicity will be manifested initially by peaking of the T waves, followed by an increasing degree of A-V block and QRS widening. Atrial standstill may be seen as far advanced potassium poisoning develops. Since certain of these changes may be masked by the pre-existing digitalis-induced arrhythmias, the decision to stop potassium must depend on the progressive changes in the electrocardiogram which can only be detected by continuous observation of the patient and the electrocardiogram.

Quinidine

Quinidine, another agent commonly used in the treatment of disorders of the heart beat, presents several special problems in therapy. Whereas digitalis improves myocardial efficiency, quinidine is in reality a myocardial poison. It is the quinidine-induced depression of myocardial rhythmicity and conduction that produces the beneficial effects observed with its use in the treatment of cardiac arrhythmias.

Oral absorption of quinidine is relatively rapid, and following a single dose the peak level may be anticipated in approximately two to three hours. By eight hours, the plasma level has declined to 50 per cent and by 24 hours to a level of 10 per cent of the peak.[5] It should be stressed that the presence of severe heart failure and renal insufficiency may significantly modify the dissipation of quinidine.

By administering quinidine every two hours, a significant blood level can be rapidly obtained. If quinidine is administered every two hours for five consecutive doses, a blood concentration of approximately 40 per cent of peak level will be present 24 hours after the first dose.[5] Even without increasing substantially the amount of quinidine per dose, a blood level in excess of 10 mg. per liter may be obtained in several days. Blood concentrations in excess of this may be accompanied by significant cardiotoxicity.

Quinidine intoxication may be manifested by hypotension and symptoms inherent in cinchonism. The latter include gastrointestinal disturbances, tinnitus and vertigo. The electrocardiographic manifestations are varying degrees of A-V block, intraventricular conduction disturbances and signs of depressed rhythmicity. Terminally, ventricular standstill and less commonly fibrillation may be seen. Metabolic acidosis and hyperkalemia are frequent concomitants.

In the patient on quinidine therapy who manifests gastrointestinal symptoms without evidence of cardiotoxicity, management consists simply of discontinuance of quinidine. Antiemetic agents, sedatives and other forms of supportive therapy may be added if necessary.

If minimal prolongation of the QRS duration is present (less than 25 per cent of the pretreatment complex) in the absence of an arrhythmia or hypotension, the patient can usually be managed on an outpatient basis, by cessation of quinidine and careful observation of the electrocardiogram and blood pressure. With the development of hypotension or an arrhythmia, immediate hospitalization is mandatory.

Treatment of quinidine cardiotoxicity is directed primarily at the hypotension usually present. This can best be accomplished by infusion of a sympathomimetic agent, such as L-norepinephrine. Secondly, there is both experimental and clinical evidence that alkalinizing agents such as hypertonic sodium lactate (one molar) will correct the delayed intraventricular conduction so characteristic of advanced quinidine poisoning, in addition to increasing sensitivity to sympathomimetic drugs and therapy aiding in restoring the blood pressure.[6] The alkalinizing agents also decrease the acidosis uniformly accompanying and contributing to the toxic effects of quinidine on the heart. The mechanism responsible for the improvement following alkalinizing agents is not clear, but most likely is related to cellular membrane metabolism, electrolyte shifts and quinidine binding to protein.

The usual dose schedule for molar sodium lactate is 1 to 4 cc. per minute intravenously with continuous electrocardiographic monitoring. The danger of administering a sodium load to a host poorly equipped to handle it must be risked in potentially fatal quinidine poisoning. As soon as improvement in the electrocardiogram has occurred, the intravenous molar sodium lactate should be discontinued and the clinical course of the patient followed closely. A rapid increase in blood pressure usually occurs as the metabolic acidosis is corrected. Should the clinical and electrocardiographic improvement be temporary, it will then be necessary to administer more molar sodium lactate. The patient, in addition to having his blood pressure and electrocardiogram monitored, must be carefully observed for evidence of impending pulmonary congestion.

Procaine Amide

Procaine amide (Pronestyl) is an anti-arrhythmic agent with most of the pharmacological characteristics of quinidine. One major difference between the two drugs, however, is the apparent effectiveness of procaine amide in abolishing supraventricular arrhythmias.

Treatment with procaine amide (as with quinidine) must be modified in the presence of severe congestive failure, renal insufficiency and electrolyte imbalance. The peak action following oral administration of procaine amide occurs in approximately 60 minutes. The rate of decline following this peak level is of the magnitude of 20 per cent per hour. Doses of 500 to 1,000 mg. every two to four hours are recommended when one is attempting to convert ectopic rhythms. This dosage may be reduced to every six hours for maintenance therapy.[5] In more serious disturbances of rhythm such as ventricular tachycardia, procaine amide may be administered intravenously with continuous blood pressure and electrocardiographic monitoring. The peak action of intravenous procaine amide occurs in four to five minutes. The usual dosage of intravenous procaine amide is 100 mg. (1 cc.) per minute. When larger dosages must be given (in excess of 1,000 mg.), it may be safer to avoid cumulative effects by administering 100 mg. intravenously every four minutes and observe the electrocardiographic changes resulting from each small incremental dose.

Toxic manifestations of procaine amide are similar to those of quinidine. Hypotension may be quite severe and may be an early sign of cardiotoxicity. In most instances, however, disturbances in intra-auricular and intraventricular conduction develop simultaneously with the onset of hypotension.

The management of the patient with procaine amide intoxication is similar to that previously described in the discussion on quinidine.[6]

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Glaucoma Screening in Sarasota County

Douglas E. Williamson, M.D.
SARASOTA

Glaucoma, the insidious disease that robs one of his sight like a thief in the night, is present in approximately 2 per cent of the population over the age of 40.[1] Since the vast majority of the population is unaware that this disease exists and, consequently, many persons are needlessly going blind, it was decided to organize a glaucoma screening program in Sarasota County. The program was organized with a twofold purpose in mind — detection of unknown cases of glaucoma and education of the public as to the nature of glaucoma and how by early detection the loss of sight can be prevented and/or arrested.

This program, which is now completing its second highly successful year, depends on the cooperation of volunteers from a number of groups: (1) The ophthalmologists who take the tensions. (2) The registered nurses who take the visual acuities, administer the topical anesthetic drops, record the tensions and handle the referral of detected cases. (3) The County Health Department which provides the building and takes care of the follow-up of detected cases. (4) The sponsoring lay organization (in Sarasota the Hi-Noon Lions Club) which provides funds for the equipment (tonometers, lighted visual acuity charts), personnel to handle registration of the persons examined and personnel to facilitate the orderly movement of these persons from one station to the next. (5) The Florida Society for the Prevention of Blindness, which provides educational material, registration forms and in conjunction with the lay organization handles public relations.

Screening Procedure

How does this program function? Through public relations (newspaper articles, radio announcements and posters), the public is made aware of the fact that glaucoma exists and is told briefly what it is. If a person desires a free test for this disease, he or she is requested to call 958-6624, which is a 24 hour answering service. The caller is then given an appointment.

During the past two years, the tests have been conducted from October through May each Wednesday from 7:30 p.m. to 9:00 p.m. in the County Health Building. Reservations for 100 persons per evening are made, and any further reservations are then made for the following Wednesday evening.

The person arrives at the County Health Department on the date of the reservation at approximately 7:30 p.m. and is then handed a number to facilitate his movement from station to station. He is given a booklet explaining the nature of glaucoma and what should be done when it is detected. The back of the booklet also explains the difference between an ophthalmologist, optometrist and optician so that he becomes aware of the fact that only an ophthalmologist, by virtue of his training and experience, is qualified to diagnose and treat this disease.

Next he is registered by a member of the lay organization. A registration blank is filled out which asks for his name, address, age and whether or not he has ever been treated for glaucoma. If he has been treated before, he is politely informed that this screening program is only for the detection of new cases of glaucoma and since he is already under treatment for glaucoma, it is important that he be checked regularly by his own ophthalmologist.

Upon receiving the registration blank, he goes to the visual acuity station where a registered nurse takes his visual acuity and records it on the registration form. He then reports to the next station where another registered nurse instills into each eye a drop of topical anesthetic (Ophthetic, supplied as a public service by Allergan Pharmaceuticals). Next he goes into a room where a registered nurse helps him to recline on a table and the ophthalmologist takes the tension with a Schiøtz tonometer. After the tension is taken, the tonometer is sterilized with a cotton pledget soaked in ether. The tension is recorded by a registered nurse, a reading of 25.8 using a 7.5 Gm. weight or above being considered a positive result requiring further evaluation. A positive test is always recorded in red.

At the next station a registered nurse interprets the findings: (1) If the test is positive,

the person is so informed and strongly advised to call his ophthalmologist without delay the following day. To make sure he sees an ophthalmologist and not someone who is unqualified, he is given a list, in alphabetical order, of the ophthalmologists in Sarasota County giving their office addresses and telephone numbers. (2) If the test is negative, the person is informed that at the present time there is no evidence of increased pressure in his eyes, which is the main finding in glaucoma. He is further informed that should he have any symptoms such as persistent undiagnosed headaches, discomfort about the eyes or blurring of vision, he should consult his ophthalmologist without further delay. (3) If the visual acuity is worse than 20/30 in one or both eyes, the person is apprised of this condition and advised that if he has not seen his ophthalmologist within the past year, it would behoove him to do so. In handling referrals in this manner, there is a minimum likelihood of the person leaving the screening program with a false sense of security that his eyes are all right if the test was reported as negative.

Results

Over the past two years, 3,285 persons were screened (at the present time one ophthalmologist is able to screen two persons every minute); in 77, positive findings were detected and they were referred to an ophthalmologist. Follow-up by the County Health Department has revealed to date that four of these do not have glaucoma. Although no one is turned away (except children when there is no history of glaucoma in the family), most of the persons examined were over age 40. The incidence of undetected glaucoma in a segment of the population, based on these figures, is then 2.2 per cent.

The program was so successful in its accomplishments and the public so appreciative of this free service that a similar program was begun in Venice. The sponsoring group there is the Venice Lions Club. The total cost of setting up and maintaining this program amounted to $300. This program also has met with tremendous success.

Today, the diagnosis of glaucoma which otherwise would be equivocal can be established with 94 per cent accuracy by means of tonography utilizing an electronic tonometer.[2] With the advent of new techniques in diagnosis and new techniques of medical and surgical treatment, it becomes most important to detect this insidious disease early before irreversible damage occurs.

The glaucoma screening program in Sarasota County, due to the cooperation of the groups involved, has been an unqualified success in facilitating the accomplishment of its objectives: (1) detection of glaucoma and (2) education of the public with regard to its existence, nature and treatment, with especial emphasis on the importance of detecting it early by having an annual test.

Summary

A highly successful, continuous glaucoma screening program has been organized in Sarasota County. Details of the program are outlined and the results of two years of screening analyzed. It is hoped that similiar programs may be instituted in other areas throughout the state.

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President's Page

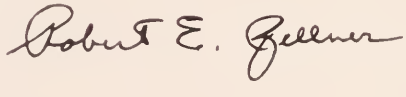
"What Is a Profession?"

What is a profession? This may appear to be a foolish question, but the answer depends upon who is replying. We hear of *professional* boxers, *professional* paperhangers, *professional* door-to-door salesmen, *professional* anything from which a man can make a living. In short, trades which for years have been looked upon as purely laboring jobs requiring neither art nor intellect are spoken of as professions. Are we, then, members of the medical profession, willing to accept this definition of a profession? I think not. Funk and Wagnall's Standard Dictionary defines a profession as "an occupation which involves a liberal education, or its equivalent, and mental rather than manual labor . . . hence, any calling or occupation involving special attainments or discipline."

There are two qualities of a true profession which distinguish it from a trade. It involves, first, an intellectual pursuit resulting in a product or a service the value of which is not subject to evaluation by the consumer; and, second, it is self-disciplining. Medical ethics are based upon the fact that the doctrine of *caveat emptor* does not apply to the medical profession. Rarely is a patient capable of judging a doctor on his ability. He bases his judgment on whether the doctor *appears* to know what he is doing, whether he *appears* to be interested in his patient, and whether he *appears* to be getting good results from his treatment. In other words, his evaluation is based on superficial appearance. At best, this is not a very sound basis for arriving at a conclusion; nevertheless, it is far better that he make up his own mind in this manner than it would be if he were under the influence of raucous advertising the accuracy of which he is unqualified to judge. Hence, it is unethical for a doctor to advertise or in any other way to try to persuade a patient that he is the "best" doctor except through the service he renders.

The second quality of a profession is that it be self-disciplining. Since the patient is unable to make an adequate evaluation of the worth of the medical services he receives, he is at the mercy of the honesty of his doctor. Fortunately, in the vast majority of times this is all the safeguard he needs; but occasionally, the self-disciplining quality inherent in a profession is needed for his protection. This is one of the prerogatives of the profession which is most jealously guarded. How often does one hear some comment like, "No politician (lawyer, insurance company, etc., etc.) is going to tell *me* how to practice medicine!" Then who *is* going to tell this fellow what his responsibilities as a doctor are in the rare case when this is necessary? There is only one answer: Another doctor. Under the best of circumstances this is a very disagreeable business. Since the medical profession has insisted on maintaining its right to discipline itself, the public has every right to expect it to do so or else someone else, acting in the public interest, will do it.

A year and a half ago the House of Delegates gave the Judicial Council "original jurisdiction," the right to initiate action against a doctor where action had not been initiated in his own county medical society. This was done because there are sometimes circumstances when a county medical society cannot act against one of its members. This was a progressive step which has enabled the medical profession in Florida to continue to maintain its high ethical standards. An unfortunate by-product of this change in procedure is that some county medical societies are taking the easy way out and are kicking all their unpleasant cases upstairs to the Judicial Council. As a consequence, the Council is becoming so snowed under with cases that it never should have been asked to consider that it is finding it difficult to do the work for which it was designed. This is a misuse of the Council and in the long run it will defeat its reason for being. As professional men, members of an honored profession, we have the obligation to stand up for what is right and good for our profession and for what is in the public interest, even if it is personally costly. The place to do this is at home where the offense has been committed. Only after the county medical society has done all it can do should the Judicial Council be asked to assume jurisdiction. If we permit our own nest to be fouled, we cannot legitimately object if someone else cleans it for us. Where conduct so deviates from the acceptable as to be unethical we have no option but to have the courage to exercise the police power over our members which has been given to us by the community. This is an individual responsibility of each medical practitioner and, while no one enjoys judging his colleague, it is a responsibility whch cannot be avoided except at the cost of having someone else "tell us how to practice medicine." Don't ask the Judicial Council to do an unpleasant job which you yourself should do.





I Have Not Been Ashamed

"I have not been ashamed to learn those things which to me have seemed useful—even from vagabonds, barbers, and executioners," wrote Paracelsus, one of the most original and daring minds medical science has ever produced. And Oliver Wendell Holmes once observed: "Medicine learned from a monk how to use antimony; from a Jesuit how to cure the ague; from a friar how to cut for the stone; from a soldier how to treat gout; from a sailor how to keep off scurvy; from a postmaster how to sound the Eustachian tube; from a dairy maid how to prevent smallpox; and from an old market woman how to catch the itch insect. It borrowed acupuncture from the Japanese heathen, and was taught the use of lobelia by the American savage." To this one might add that in modern times, a great step forward in treating mental disease was learned from Indian fakirs.

Surrounded by today's technical aids in diagnosis and the modern miracles of surgical technique, by which hearts are opened with about as much safety as was the abdomen 50 years ago, it is easy to forget that medicine is a scholarly profession with cultural roots that go back to man's beginning in time. The first physician of record, Imhotep, was worshipped as a god in Egypt for nearly a thousand years—yet he was perhaps an even better architect than he was a physician, designer of the oldest man-made structure now in existence. And many of the principles of sanitation and public health upon which the great cities of today depend to save them from destruction by unseen killers, were practiced by the Israelites on their journey from Egypt at least three thousand years ago.

The often amazingly modern knowledge of Greek and Roman medicine was largely preserved for the world by the Arabs and left in Europe, only just then beginning to grope its way from the Dark Ages into the light of the Renaissance, as the ebbing tide of Moslem conquest flowed back through Spain and eastward along the northern coast of Africa. And in our own time we envy Russian surgeons their skill in grafting entire limbs, or even heads, while forgetting that even under the Czars, Russian medical science was pioneering in the techniques of experimental surgery.

The art of medicine has always treated the whole man as a part of his environment and affected by many factors. Medical science must now go one step beyond and enter the family of the sciences, for all are interdependent. The biophysicist, probing the heart of the DNA molecule for the very secret of life itself, is as much a part of medical science as the surgeon repairing a heart valve—distorted by the genes of hereditary transmission which themselves are composed of DNA. So is the sociologist seeking to remedy crowded and substandard housing where cockroaches carry the virus of infectious hepatitis, or the economist seeking to train unemployed coal miners for new jobs that will give them back their self respect and their mental health.

As the New Year begins, what better resolutions could any physician make than that he will: seek solutions to problems, instead simply of opposing those whose solutions he does not approve; cultivate a wider knowledge of his ancient heritage in order to be a wiser man today; and, most important, use his intelligence and his understanding to furnish leadership in the many parts of his community's life where an appalling vacuum crying out for such leadership now exists?

Frank G. Slaughter, M.D.
Jacksonville

Editor's Note: This is the tenth consecutive year The Journal has published a guest editorial in December by Dr. Slaughter, Florida's distinguished physician author.

December Is the Month for Faith

December is the month for faith. That sounds rather superficial. Faith should not have a "season." Faith should be a constant factor in our lives. Human nature being what it is, however, we need temporal as well as tangible areas for the renewal of our faith, for the regeneration of our spiritual values. December is such a church and synagogue in the dimension of time, as the actual house of prayer is in the dimension of space. This is no mere coincidence. Christianity and Judaism are bound together historically in many ways, not least of all in the memories which the twelfth month awakens.

It is a well known fact that the twenty-fifth of December is a sacred day for Christians. It is less widely recognized that it is also the twenty-fifth day (of the Hebrew month of Kislev, a goodly portion of which always falls in December) that is significant for Jews. And it is probably still less popularly appreciated that both heritages built their December programs on a common pagan winter festival of fire which was symbolic to ancient man of the ultimate dispelling of darkness and fear and of the return of light and hope.

We are no longer afraid of the shorter days and the longer nights that are characteristic of December. But we still need the message of December in a world short on stability and long on anxiety.

As a Rabbi and Jew, I need tell no Christian of the meaning of Christmas to him. He lives by his faith. And from his faith springs the promise to all of peace on earth and good will towards men. Join this promise to the Jewish December memory of the Maccabees who, two centuries before Christianity, established the principle of freedom of religious conscience and we have the essence of the Judaeo-Christian civilization. The right to one's own faith and the indispensability of the faith of one's choice to human striving, human betterment, and human fulfillment—these are what December has kept alive in our hearts.

Since both Judaism and Christianity stress the urgency of translating faith into life, let us recapture, in this month of December and all time, what it is that we must so translate. Faith in the worth of every human being. Faith in the sacredness of all human life. Faith in the possibility of each human being realizing his highest potentials and in the efficacy of love and understanding as the indispensable means of such realization. And faith that, if enough men believe in these things and join together in putting the beliefs into practice, the world need not remain a vale of tears.

December is the month for faith. May the warmth of the candle flames, the joy of the songs, the pleasantness of the gifts, the delight of the family togetherness, and the reverence of the heart which govern the lives of Christian and Jew in December presage the freedom, the justice, and the peace which, with God's help, may yet reign on earth for all men for all time.

Dr. Joseph R. Narot, Rabbi
Temple Israel of Greater
Miami, Florida

Editor's Note: This is the second in a series of guest editorials appropriate to the season by leading ministers and rabbis published upon solicitation in the hope that physicians will find these messages a source of guidance and inspiration.

Digitalis, Quinidine, Procaine Amide and Potassium Intoxication

The lay press has recently featured the toxic effects of drugs released prematurely. On page 490 of this issue of The Journal there is a timely article on the management of digitalis, quinidine and procaine amide intoxication. This article invites careful perusal since it reviews the management of intoxication not only from digitalis, quinidine and procaine amide but also from potassium. William Withering, in 1785, clearly warned about some of the common errors current in digitalis medication. During the past 175 years, innumerable papers have appeared in the medical literature describing the proper use of digitalis and the symptoms of intoxication. Today we read that it is suspected that one out of every seven patients admitted to the hospital taking digitalis is receiving it in toxic doses. Digitalis is a life-saving drug; yet its proper use and dosage require not only science but much art and skill.

Quinidine was prepared and given its present name by Pasteur in 1853. It is another life-saving drug that must be given with great skill, particularly if administered parenterally. The life-giving properties and dangers of parenteral procaine amide and potassium have been described for little over 10 years; yet by measure-

ment of modern times, these drugs have been in use 10 times as long as many drugs commonly prescribed today.

Who should decide when these life and death medications should be released to the practicing physician? I believe the individual physician is best qualified to determine his own ability to use these drugs properly. This article offers additional evidence that the qualified physician must continue his education throughout his entire medical career and must limit himself to those procedures which he knows how to do well.

C.K.D.

An Objective View of Blue Shield

In discussing Blue Shield at this time, I think we should ask ourselves several questions and endeavor to answer these questions objectively. Obviously, to be objective is difficult for one who is constantly working with Blue Shield, but nevertheless, I shall endeavor to be as objective as at all possible. The first question might be, "Why Blue Shield in the first place?" I have previously directed attention to Dr. Leigh Robinson's statement regarding Blue Shield and I am still convinced that it answers this question concisely. Dr. Robinson was the first president of the Board of Directors of Blue Shield and in a speech relative to the creation of Blue Shield, he made the following statement: "The members of the Public Relations Committee made many observations relative to how important it was for the Medical Profession to sponsor such a program. They felt that it would furnish the best means of building much needed good public relations for the Profession. At that time, there was a growing public demand for prepaid health and hospital insurance protection. It was felt that unless the public could be convinced that the job could be done with voluntary insurance, Socialized Medicine would result. The opposition in Congress to compulsory health insurance was urging the Medical Profession to lend full support to Blue Cross and Blue Shield. They contended that once these voluntary plans showed promise, Government Medicine would lose favor and the public would be willing to wait and see what could be accomplished on a voluntary basis."

The second question in order probably should be, "Has Blue Shield accomplished the objective for which it was created?" At the present time, the answer to this question is obviously yes. The Forand Bill came far from getting out of committee and the King-Anderson Bill, even though coming much closer, did not pass. It has been noteworthy that the legislators opposing the King-Anderson Bill continually mentioned the tremendous increase in voluntary health insurance and on many occasions specifically mentioned Blue Shield and the proposed plan of nationwide Blue Cross and Blue Shield coverage for the aged. Those favoring the King-Anderson Bill were anxious, no doubt, to get it passed before Blue Cross and Blue Shield wrote such a policy. We, in Florida, should be particularly appreciative of the action of Senator Smathers in opposing the King-Anderson Bill in the face of tremendous pressure from the administration.

We now come to the question which is probably the most debated question of participating physicians and that is, "What should be the income limit for Blue Shield?" Blue Shield in Florida began with a $3,000 income limit, the idea being that the purpose was to provide medical care for people in the low income level. Then the 'J' contract raised the limit to $3,600. Following this increase, the 'K' contract and the federal employees high and low option contracts raised the income level further—the high option having a $6,000 income level and the 'K' contract a $4,000 income level. Now, is it consistent to offer one group a $6,000 income level contract and not offer it to others? Most everyone thinks that it should be offered to everyone. It is obvious that the $3,000 income level contract offered in 1946 will not cover the same segment of population today. In other words, to cover the same segment of population, a much higher income level contract must be made available.

"Why is it necessary to offer high income level contracts?" The answer here is that the very existence of Blue Shield today depends upon its ability to compete in the insurance market. There are 400 insurance companies selling health insurance in Florida, and there no longer exists the virgin field which existed when Blue Shield of Florida was created. Everything Blue Shield sells today is in direct competition and in a sense must be taken away from another company. How would any physician feel if he were told that he was to see only low income level, indigent and poor risk patients? If Blue Shield could exist on

low income level policies, it would be fine, but it cannot. It is impossible for Blue Shield to bid on many group contracts because of the inability to meet their specifications. Some may think that I am crying 'wolf' and will probably quote statistics in proof. Such statistics they might quote would be that during the first five months of 1962, Blue Shield enrolled 98,000 people. They might even quote statistics showing that in 1960 the net increase in Florida of all health insurance companies was 47,000 and the net increase of Blue Shield of Florida was 46,111. They would probably fail to include that for the first five months of 1962 there were 18,000 per month drop-outs in Blue Shield; so it becomes apparent that it was necessary for Blue Shield to sell 98,000 contracts during this five month period to keep its head above water. As I have said before, these 98,000 contracts must be taken away from its competitors.

The last question which I shall ask and try to answer objectively is: "Is it necessary that the doctors control an insurance company such as Blue Shield?" I believe that most doctors think that it is. Recently, the governor of the State of Rhode Island sponsored a bill to put public representatives in majority control on Blue Shield's Board of Directors. Shortly afterwards, Rhode Island Physicians Service by-laws were amended, shortening the required notice of resignation from participation from 13 to three months. Soon, Rhode Island doctors were threatening to resign en masse if the bill went through. This incident in Rhode Island gives us a concrete example of how a large group of physicians regard the control of Blue Shield. I sincerely believe the doctors of Florida think that Blue Shield should be controlled by them. Blue Shield of Florida needs more doctors to stand up and be counted. It needs a wider variety of contracts and more comprehensive coverage, even if it necessitates increasing the income level. Health insurance is becoming more competitive each year. Blue Shield must prepare to meet this competition or fall by the way.

Carl S. McLemore, M.D.
Chairman, Committee of 17
Orlando

It Is Not as Safe as You Think

A young mother just delivered of an eight pound baby boy lay in a hospital bed, a pint of blood up-ended on a stand beside her and a tube leading to a needle in her arm. The doctor had told her she would be up on her feet faster with three pints of blood inside her. Suddenly, she felt chilly and became restless. Soon thereafter, her heart began pounding, and she experienced some difficulty in breathing. The young mother was now well on her way toward becoming a statistic.

Not too many years ago, the giving of blood by one person to another was looked upon with vast incredulity. A specialist was needed for the service. Then, after a period of trial, error, and growing familiarity, blood transfusions came to be given almost routinely for anything from a simple appendectomy to a complicated stomach resection. It has finally evolved into a simple procedure performed in some hospitals by nurses.

On countless occasions, blood has been used preoperatively in anticipation of blood loss during an elective operation; on other countless occasions, it has been used as a "booster" to hasten convalescence. In 1958, 9.2 per cent of all hospital cases or 2.2 million persons received blood transfusions. In 1959, the figure rose to 3.5 million. The American Red Cross has estimated that eight pints of human blood are used every minute of every day of the year.

Through a voluminous lay press, the public has become quickly educated to the virtues and uses, but to few of the dangers and abuses of blood transfusion. Many patients, upon learning that a slight anemia exists, may request hospitalization in order to receive blood transfusions, or a mother, after a perfectly normal delivery with minimal blood loss, may expect one, sometimes two, and occasionally three pints of blood. The majority of people, however, are blissfully unaware that more people die from transfusion reactions than from appendicitis, that within the present year an estimated 3,000 patients in American hospitals may die because something went wrong in the course of a blood transfusion. All they care

to know is that a father or a husband or a son has deposited so many pints of blood in a company bank, a lodge bank, a county bank, or a hospital bank and the pints are sitting there, rightfully theirs, ready and waiting, and why not use the blood. The public, educated to one facet, but not to another, fails to heed the oft-quoted words of Dr. Lester J. Unger, director of the blood bank of New York University–Bellevue Medical Center: "Every bottle of blood is a bottle of dynamite. It can do a great deal of good or a great deal of harm." In Utah, the Supreme Court has written into the judicial record "the thesis that all blood transfusions, whatever the precautions taken, carry a risk of death."

To the layman, however, blood is blood. It is the thick red fluid that comes from a cut finger or a nosebleed. After a few minutes in the air, it becomes sticky and, after several days, it is a scab. Blood is the bluish red fluid the doctor draws from the vein of a layman when he is about to get married. It is what they take out of him and put into a pint bottle when he goes down with the rest of the boys to the Blood Bank on a Thursday night—and if he is lucky, he will get a drink out of it.

To the physician, on the other hand, a drop of blood is an amazingly complicated laboratory containing among other things, a host of different foods, minerals, vitamins, chemicals, gases, water, blood cells, antibodies, antigens, and hormones. In addition, this one drop may contain one or more types of disease-bearing organisms. The disease might be syphilis, malaria, or hepatitis. It follows, then, if blood containing the malaria parasite is given to a patient, that patient will contract malaria. When a donor presents himself at a blood bank, he is questioned as to his past illnesses. At that time, he may be rejected because of having had certain diseases. In many instances of paid blood donors who return every eight or 10 weeks and who know they will be deprived of money if they admit to a history of jaundice or hypersensitivity, their stories are highly unreliable. Sometimes, a donor may honestly have forgotten some long ago disease. Later studies on the blood will detect the disease—with but one big exception: serum hepatitis. Today, there is no laboratory test or battery of tests specific for the identification of the virus which causes serum hepatitis. The word of the donor must be relied upon; yet it is well known among doctors that a donor's history is unreliable at times. The donor may have forgotten a liver disease he had some 10 years previously, or he may be an innocent carrier of the disease, never having had any signs of jaundice or hepatitis in his entire life. It has been estimated that approximately 6 per cent of the population are carriers of the hepatitis virus.

Unfortunately, today, there is no acceptable manner of treating blood so as to kill the virus of hepatitis should the organism be present. Hit or miss, therefore, a recipient may come down with a severe, even fatal, case of hepatitis anywhere from 14 to 150 days after a single blood transfusion. Of course, chances increase with multiple transfusions. The incidence of hepatitis with only one unit is 0.6 per cent; with two units, it is 1.1 per cent; and with five or more units, it springs up to 1.09 per cent. Looking at it in another light, Dr. Alexander S. Wiener had once estimated that hepatitis resulted from blood transfusion in 1 out of 500 cases. Hence, some scientific investigators have even suggested that bottles of blood should carry warning statements concerning the inherent risk of contracting hepatitis. Unfortunately, hepatitis is on the increase. As of March 19, 1960, 8,160 cases had been reported. So far, 1961 was the peak year. What 1962 will bring is anyone's guess. With more of the disease around, the chances of getting it through blood transfusion are greater.

Another pitfall awaits the patient in the matching process. Since the turn of the century —because of the brilliant work of Dr. Karl Landsteiner and his group—it has been well known among doctors that blood can be divided into four basic groups. Then, while many of us were still in medical school, came along the Rh factor to complicate a simple thesis. To confuse us even a little more after we had entered practice, we began reading here and there in various journals of blood-group antigens and antibodies, anti-Penney, and isoantibodies along with many other new terms, and a whole new field of human blood groups and blood-group immunology was growing into man's knowledge. The techniques for matching and cross matching were becoming almost perfect with but one fly in the ointment: human error. The technician may be new and inexperienced, or the technician may even be an inexperienced medical student working nights and holidays when the regular technician is off duty. The labels and reports may become mixed up, or, on the floor, there may be wrong patient identification by the nurse. In some cases, even when no incompatibility can be demonstrated by our most

sensitive present methods and no type of sensitization is known to exist in the patient, a severe reaction can still occur.

Difficulties may also arise from inadequately refrigerated, outdated, or contaminated blood. Fortunately, however, because of better methods of refrigeration and stocking, and more accurate tests on the blood, this source of trouble has become less frequent.

Danger can also be present by overloading the circulatory system of the patient, especially the elderly patient who might be bordering on congestive heart failure. It is true that if a patient hemorrhages badly, losing more than one liter of blood, then certainly a replacement of the lost blood is in order. An overenthusiastic but well meaning physician, however, may order enough blood to replace the lost blood two or three times over. The circulatory system may not be able to cope with this extra blood, and complete collapse of the whole system may follow.

Another possible consequence worth mentioning only in passing is cardiac arrest due to potassium intoxication as seen in LeVeen's series of 50 patients.

Mr. Average Man should remember that along with his realization that blood is a wonderful tonic and that since 1900, blood transfusion has had a brilliant record, saving millions of lives both in hospitals and on the battlefield, certain potential dangers are always present in transfusing a patient. At times, even physicians tend to forget the hazards involved and order transfusions as freely as they would intravenous infusions of glucose. The physician must consider blood transfusion as carefully as any other major procedure on the human body. Using all his knowledge and past experience, he must carefully weigh the possible benefits to the patient against the potential dangers he knows to exist in every bottle of blood. If there is a definite indication, a definite reason for blood transfusion and no other procedure will do, then the doctor must go boldly ahead and transfuse the patient. He cannot allow himself to be influenced by the patient who has hospitalization insurance and three pints of blood to his credit in the lodge blood bank. Mr. Average Man, too, must realize that there are inherent dangers and not push his doctor for a pint of blood because he has been feeling "beat" lately and the neighbor across the street tells him whole blood is the best remedy for that "beat" feeling.

Arthur F. Schiff, M.D.
Miami

Public Welfare and the Practicing Physician

As is true of each of you as a physician in Florida, the State Department of Public Welfare has a concern and a responsibility through its Public Assistance Division for the medical needs of those Florida citizens who do not have and cannot acquire the minimum basic necessities of life, and are either permanently and totally disabled, blind, aged, or dependent children. Because of your involvement with this segment of our Florida citizens, and in recognition of the fact that a physician is an essential person in any individual's illness, injury, or disability, the Department of Public Welfare is fully aware that the effectiveness of its medical program depends to a large degree on the understanding, co-operation, and assistance of the many physicians throughout our state. Our purpose here, therefore, is to give explanation and clarification of our Agency and our medical programs as a means of promoting and encouraging to the fullest your continued understanding, cooperation and assistance.

Public Assistance is a state-administered, state-federal supported governmental service, created by the Social Security Act, which provides the minimum basic necessities of life, as well as certain services for four categories of our citizens. These specific categorical programs by name are Old Age Assistance, Aid to the Blind, Aid to Dependent Children, and Aid to the Disabled. While Public Assistance is a complicated administrative program, it is also much more. It is offering guidance and specialized service to those with problems beyond their immediate power of personal solution. It is hospitalization for an old woman living alone who has pneumonia. It is food for a thin hungry child whose mother is dead and father is sick. It is life-saving medicine for a feeble old man in a nursing home. It is planning for the best utilization of available money. It is a never ending process of checking, reviewing, and evaluating to determine how the interests of the recipient and the general public can best be served. It is these things and many others. Inherent in the philosophy of these programs are such democratic principles as these: that human beings have a responsibility for the well-being of each other; that communities have a responsibil-

ity to meet the basic needs of people who lack sufficient resources for their maintenance; that people in need should be treated with dignity and justice, and if their circumstances are the same, they should be treated the same.

In administering these four basic programs, the Public Assistance Division has two equal responsibilities. First, it has a responsibility to the person in need to insure that his needs are met as adequately as possible within the limitations of the law. Second, it has a responsibility to the citizen to insure the proper expenditure of public funds. In order to meet fully these two responsibilities, it is obviously imperative for the Agency to have a close and cooperative working relationship with key organizations and people in the community. As a recipient's private physician, you are one of those key persons, and as a member of the Florida Medical Association, you belong to one of the key organizations.

There are five programs administered by the Public Assistance Division that are medically oriented and involve you as the practicing physician. Two of these programs, Aid to the Blind and Aid to the Permanently and Totally Disabled, are basic categorical programs previously mentioned. The remaining three programs are Hospitalization, Nursing Home Care, and Prescribed Medicine. The latter three programs are for those who have been found eligible for public assistance by meeting all of the many eligibility requirements, including need, and in addition, are in one of the four categories.

When a person applies for Aid to the Blind, or Aid to the Disabled in his local community, a social worker of this Agency spends considerable time in his home. An effort is made to understand him as a human being with problems that are uniquely his own. Thorough explanation is given the applicant as to the nature and limitations of the assistance for which he is applying. Further assistance is given the applicant regarding the information needed to determine eligibility and how this information might be obtained. Of course, one of the major factors of eligibility for Aid to the Blind is the determination of legal blindness. An examination by a qualified ophthalmologist or optometrist of the applicant's choice is necessary, and a report of this examination is reviewed by the State Supervising Ophthalmologist. On the basis of the content of this report, the Supervising Ophthalmologist makes the decision regarding the eligibility on the factor of blindness.

Decisions on the eligibility factor of permanent and total disability are made, however, by review teams in the State Office located in Jacksonville. Each team, composed of one medical doctor and one medical social worker, makes the final decision. This decision is based on the medical report of the basic medical examination by a doctor chosen by the applicant, and (or) other available medical information, and a detailed social report written by the social worker who is assisting the applicant in establishing eligibility. It is of interest to note that all physicians on the Medical Review Teams are specialists in their own field, and each is either currently involved in private practice or has had many years of experience in such practice. Each of the social workers on the Teams has had formal graduate social work training, plus many years of work experience in clinics and hospitals.

In both the Aid to the Disabled and Aid to the Blind programs, the final decision on the eligibility regarding blindness or permanent and total disability must be directly related to the report of the examination by the applicant's private physician or another local physician chosen by the applicant to make the examination. The significance of this report is self-evident, since in the absence of a thorough and accurate report by the examining physician, it is altogether impossible for the Teams to make fair and accurate decisions on eligibility.

Recipients of public assistance are eligible for hospitalization for acute illnesses, prescribed medicine and nursing home care only on the recommendations of the attending or examining physician, as the need for this service must be established by this local physician.

We feel sure that you can understand the difficulties and the problems of administering these various programs for the eligible citizens of our state. To do so humanely, and with justice and economy, is our goal. On behalf of the Staff of the Department of Public Welfare, we wish to thank you who have so generously and ably worked with us in the past months and would bespeak your continued help in the months to come.

Turner Z. Cason, M.D.
Chief Medical Consultant
Florida State Department of
Public Welfare
Jacksonville

Association News

Fifth Annual Conference County Medical Society Presidents and Secretaries

The Fifth Annual Conference of County Medical Society Presidents and Secretaries to be sponsored by the Florida Medical Association will be held at the Hotel Robert Meyer in Jacksonville on January 12 and 13, 1963. "Florida Medicine in the Space Age: Are We Up to Date?" is the theme chosen for the meeting, and the program covers a broad range of subjects of wide interest.

Topics which are to be discussed on Saturday afternoon, January 12, include "How We Doing?" "What We Have and What We Need: Florida's Indigent Care Programs and Further Kerr-Mills Implementation by the Legislature;" "The FMA Relative Value Studies and the Workmen's Compensation Fee Schedule: What's Been Done and Where We Stand;" "What Your State Association Has to Offer: Benefits of FMA Membership Programs," and "Who's Chasing the Blues? Where Blue Shield Has Been and Where It's Going." Following a short recess, the day's program will be concluded with a panel discussion of "Medicine Down on the Farm: What We Have in Common with Our Friends in Agriculture."

The following day, the discussions will include "What's Legal and Illegal: Some Points Your Society Should Watch," and "Operation Success: What Some County Societies Are Doing," by a panel of representatives from six component county medical societies.

The formal Conference program will begin Saturday afternoon; however, tours of both the Blue Shield and the Florida Medical Association buildings have been arranged for Saturday morning. At noon, lunch will be served with Blue Shield as host in its building.

Florida Medical Foundation

It is appropriate at this time when the Florida Medical Foundation is making its annual appeal for voluntary contributions, as authorized by the Florida Medical Association House of Delegates in 1959, that the history and accomplishments of the Foundation be reviewed.

The Florida Medical Foundation was established by the Florida Medical Association in 1956, received its charter in that year and adopted its by-laws in 1957. Dr. Edward Jelks was its first president. An official ruling from the Internal Revenue Service in 1959 stated that the Foundation was exempt from federal income tax and contributions to it were deductible.

The Board of Governors of the Florida Medical Association constitutes the Foundation's Board of Directors, and the officers of the Foundation are elected from this group. Present officers are Dr. Leo M. Wachtel, president, Dr. S. Carnes Harvard, vice-president, and Dr. Henry J. Babers Jr., secretary-treasurer.

The presently constituted objectives of the Foundation are to:

1. Improve the health and medical care of the people of Florida
2. Promote and sponsor medical research
3. Sponsor graduate and postgraduate medical education
4. Aid medical students needing assistance
5. Assist deserving indigent or destitute physicians

A Trust Agreement with the Florida National Bank of Jacksonville was executed in February 1958, which has several divisions. Trust Funds have been set up for the Dade County Medical Association and the Florida Academy of General Practice to administer medical student loans; agreements are in effect with the Florida United Community Funds, Inc., for a medical research program and with the Florida State Board of Health for research and development programs.

Up to this time the Foundation through its own funds and through the funds it administers has contributed $18,597.10 for five research projects, has loaned $10,200.00 to 15 medical students and $5,775.00 to 11 medical graduates in training.

The Foundation has set up procedures for application and granting of research funds and loans. All successful applications for research funds must be approved by the Committee on Research of the Florida Medical Association and by the Foundation Board of Directors.

In December 1962, as in previous years, and by the authority of the 1959 FMA House of Delegates, a statement is being mailed to each member of the Florida Medical Association, reminding each one of this annual voluntary contribution of $7.50 or more. This is a deserving, beneficial, as well as deductible method of putting your money to work.

Other contributions, earmarked for the AMA Education and Research Fund or donations to specific medical schools may be transmitted through the Florida Medical Foundation when requested.

Leo M. Wachtel, M.D.
Jacksonville

News

The Brevard County Medical Society presented its first scientific seminar at Cocoa Beach late in September. Co-sponsors were the Florida Academy of General Practice and Pfizer Laboratories. The program consisted of a discussion of "The Problem of Repeated Respiratory Infection in Children," by Dr. Richard T. Smith, head of the Department of Pediatrics at the University of Florida College of Medicine; "Measle and Oral Polio Vaccine," by Dr. Albert E. Woeltjen, Associate Medical Director, Pfizer Laboratories; "Diagnosis and Treatment of Neck Pain," by Dr. Charles R. Sullivan, Assistant Professor of Orthopedic Surgery, Mayo Clinic, and "A Round-Trip Journey from Anesthesia to Psychiatry via the Fluorinated Ethers," by Dr. John C. Krantz Jr., head of the Department of Pharmacology, University of Maryland School of Medicine. Dr. Edward R. Annis of Miami, President-Elect of the American Medical Association, was principal guest speaker at the luncheon session.

Dr. Sullivan G. Bedell of Jacksonville has been elected secretary-treasurer of the Southern Psychiatric Association.

The Council on Scientific Assembly of the American Medical Association invites physicians

to submit titles and brief abstracts of scientific papers they wish to deliver at the 1963 annual meeting which will be held in Atlantic City June 16-20. The deadline is December 15. Abstracts should be sent to Dr. George R. Meneely, Secretary, Council on Scientific Assembly, 535 North Dearborn St., Chicago 10.

An unrestricted grant of $5,000 for medical research has been presented to the University of Miami School of Medicine by Wyeth Laboratories. The award is one of 20 made annually by the pharmaceutical manufacturer.

A postgraduate course entitled "Advances in Angiography" has been scheduled at Jackson Memorial Hospital in Miami for March 28-31, 1963. The course is sponsored by the Department of Radiology of the University of Miami School of Medicine.

Physicians having patients with known or suspected tuberous sclerosis whose families would be willing to cooperate in relatively minor investigative procedures are requested to contact Dr. Charles H. Carter, Research and Medical Director of Sunland Training Center at Orlando. Dr. Carter and his colleagues are making an effort to investigate the condition in as complete a manner as can be done with limited facilities. He states that there are several cases in the Sunland Training Centers in Florida but that more patients would be most helpful in the research efforts.

Deaths

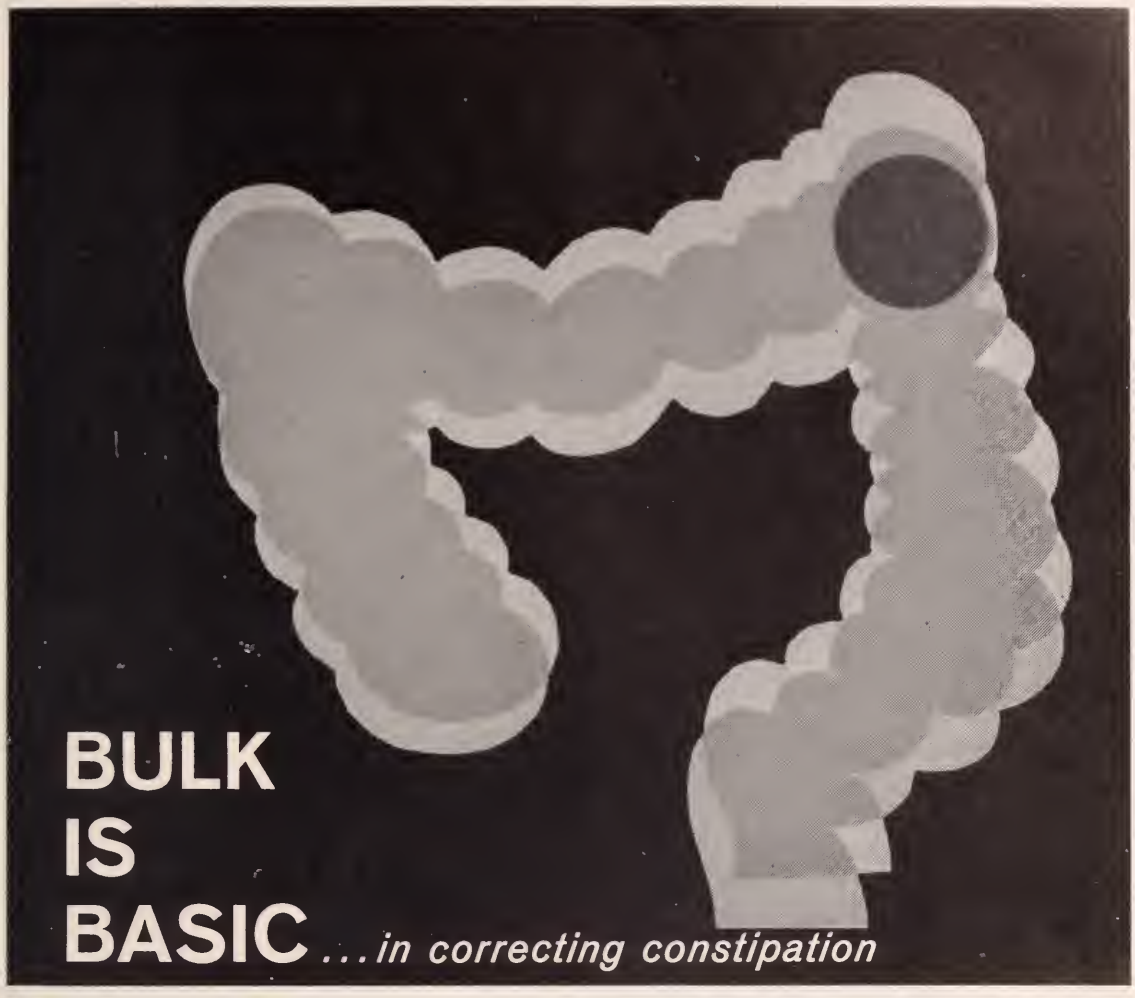
Cherry, Henry Spurgeon, Center Hill; born in Dothan, Ala., on Feb. 11, 1883; Medical College of Alabama, Birmingham, Ala., 1907; engaged in the general practice of medicine at Webb, Ala., for a short time, and in 1908 located in Center Hill where he continued to practice for 54 years; served as president of the Lake County Medical Association for three terms; was a member of the American Medical Association; died March 22, aged 79.

Collins, Grover C., Palatka; born in Berea, Ky., on Oct. 16, 1910; University of Tennessee College of Medicine, Memphis, 1941; interned at St. Elizabeth's Hospital, Covington, Ky., served residencies at the U. S. Naval Hospital, Key West, and the U. S. Naval Hospital, Miami, and later engaged in special postgraduate work at George Washington University School of Medicine, Harvard Medical School, Tulane University School of Medicine, University of Virginia School of Medicine, Cornell University Medical College and University of Pennsylvania School of Medicine; practiced internal medicine in Palatka for 16 years; was a veteran of World War II and a commander in the United States Navy Active Reserve; was a past president of the Putnam County Medical Society and the Florida Diabetes Association and a member of the American Medical Association, American Heart Association, Florida Heart Association, American Diabetes Association, and Southern Medical Association; was a former director of Florida Blue Shield; died August 12, aged 51.

DeVore, Etta Louise Marshall, Miami; born in Hayden, Colo., in 1883; George Washington University School of Medicine, Washington, D. C., 1928; entered the general practice of medicine in Miami in 1928 and continued to practice there, specializing in anesthesiology, until her retirement in 1953; held membership in the American Medical Association; died August 26, aged 79.

Fox, Frederick Jay. Clermont; born in Philadelphia, Pa., on June 30, 1900; University of Pennsylvania School of Medicine, Philadelphia, 1924; served internships at Children's Hospital, Germantown Hospital and Northeastern Hospital in Philadelphia and Metropolitan Hospital in New York City; engaged in the general practice of medicine in Philadelphia for 20 years before locating in Clermont in 1948; was a veteran of World War I; retired in 1954 because of physical disability; was a member of the American Medical Association; died May 17, aged 61.

Gray, Frank Dorsey, Orlando; born in Thomson, Ga., June 18, 1893; Medical College of Georgia, Augusta, Ga., 1921; interned at University Hospital, Augusta, and from 1923 to 1926 served a residency at the U. S. Marine Hospital, Savan-



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1. Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice, ed. 6, Baltimore, The Williams & Wilkins Company, 1955, p. 578.

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Research in the Service of Medicine

nah, Ga.; had practiced general surgery in Orlando since 1926; was a past president of the Orange County Medical Society, Florida Railroad and Industrial Surgeons and Seaboard Air Line Railroad Surgeons, and was a former secretary and twice chairman of the State Board of Medical Examiners, on which he served for 17 years, receiving five appointments from four governors; served the Florida Medical Association as vice president in 1943 and as a member of the House of Delegates for a number of years; also held membership in the Southern Medical Association, Southeastern Surgical Congress, Atlantic Coast Line Railroad Surgeons, American Railroad Surgeons and American College of Surgeons, serving on its board of governors; died August 12, aged 69.

Lansman, Wilfred, Miami Beach; born in New York City on May 4, 1923; Middlesex University School of Medicine, Waltham, Mass., 1945; served an internship and a residency at St. Francis Hospital, Miami Beach; entered the general practice of medicine in that city and after serving from 1951 to 1953 with the United States Army in Korea, resumed his practice there and was primarily interested in geriatrics; was a founder and first president of The DCMA Art Association, Vice-President of the American Physicians Art Association and chairman of the art section of the American Medical Association during its annual meeting in Miami Beach in 1961; was a member of the American Medical Association and the American Academy of General Practice; died August 21, aged 39.

McDonald, John McWilliam, Jacksonville; born in Nissouri, Ontario, Canada on Aug. 20, 1889; University of Toronto Faculty of Medicine, Toronto, 1916; after serving four years in the Canadian Army Medical Corps with the rank of captain during World War I, interned at St. Mary's Hospital, Duluth, Minn., and served residencies at West Hammersmith Hospital and North London Hospital, London, England; practiced industrial and public health medicine in Niagara Falls, N. Y., for 10 years and for 10 years in Baltimore, Md., where he served the Baltimore City Health Department, before locating in Jacksonville in 1949; was affiliated with the Florida State Board of Health for 13 years and served as director of the division of industrial hygiene; was a member of the American Medical Association and the Florida Public Health Association, in which he served as chairman of the medical section at one time; died October 16, aged 73.

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Shapiro, Richard Daniel, Miami Beach; born in New York City in 1917; Marquette University School of Medicine, Milwaukee, Wis., 1941; located in Miami Beach in 1949 and engaged in the practice of radiology; was a member of the American Medical Association, the Radiological Society of North America and the American College of Radiology; died August 1, aged 44.

Turner, John Calvin, Sr., Miami; born near Camilla, Ga., on Dec. 19, 1888; Johns Hopkins University School of Medicine, Baltimore, 1915; spent three and a half years in postgraduate training in surgery at St. Luke's Hospital and Brooklyn Methodist Hospital in New York City and Johns Hopkins Hospital in Baltimore; served in the U. S. Expeditionary Force in France as commander of an evacuation unit during World War I; entered the general practice of medicine in Miami in 1919; served the Dade County Medical Association in many capacities and was its president in 1922; was a member of the American Medical Association; died August 5, aged 73.

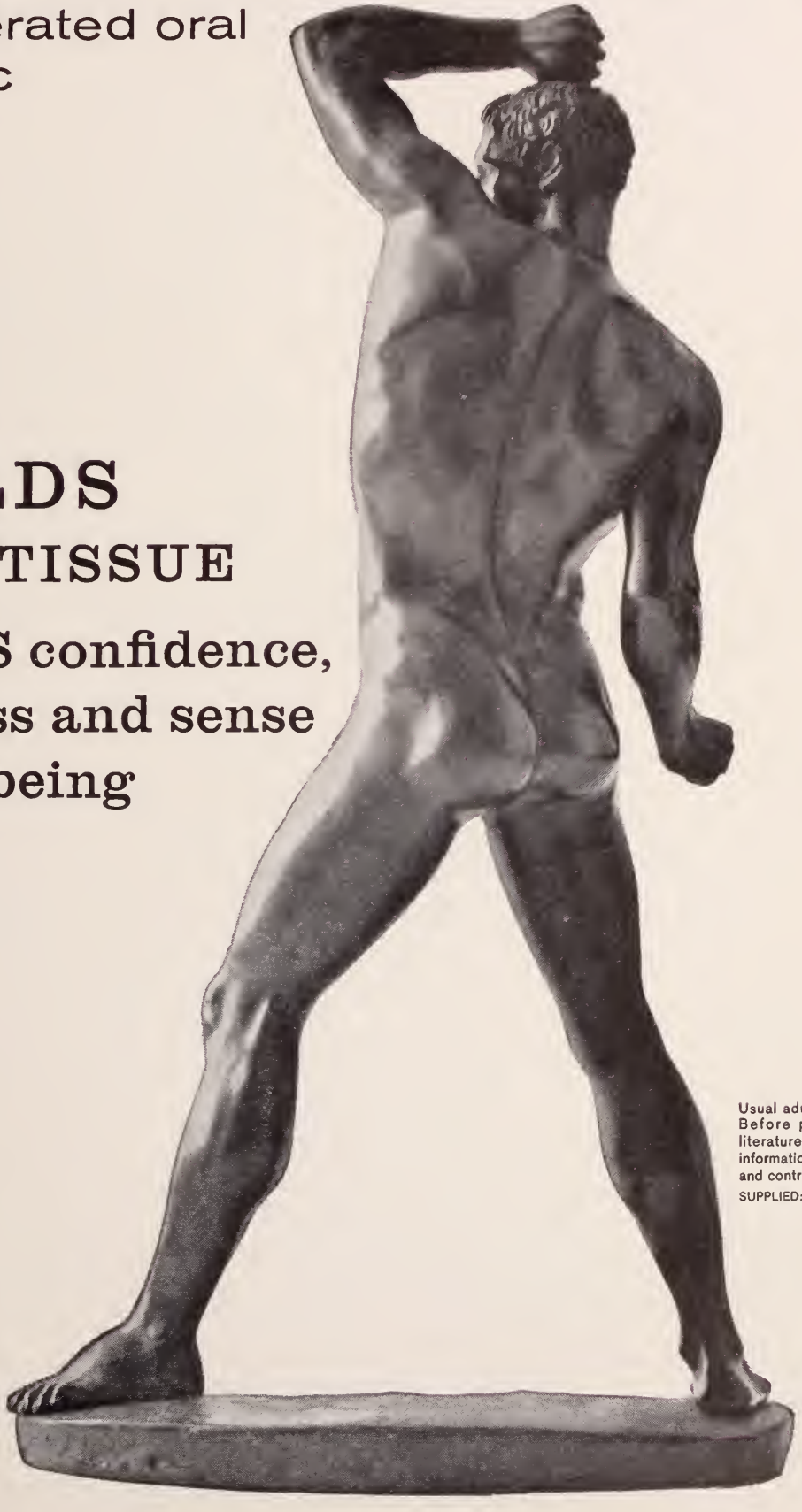
White, Wilfred Jones, Belle Glade; born in Chatham, Ont., Canada on Jan. 25, 1891; University of Western Ontario Faculty of Medicine, London, Ont., 1916; served internships at Harper Hospital, Detroit, Mich., and St. Joseph's Hospital, London, Ont., and a residency at Tampa Municipal Hospital, Tampa; had engaged in the general practice of medicine in Belle Glade since 1930; died July 25, aged 71.

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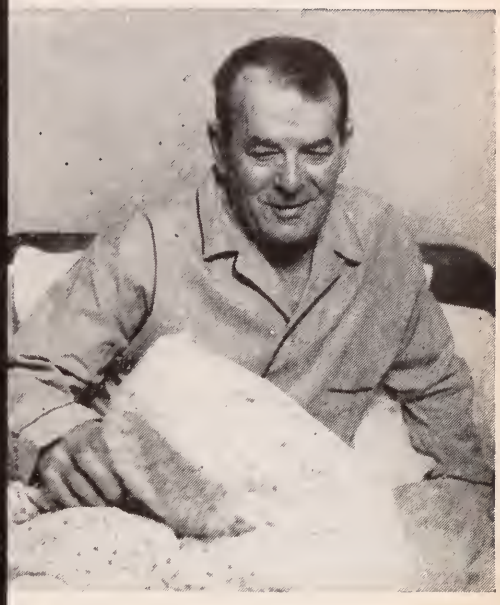


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PEDIATRICIAN WANTED: For association in Hollywood, Fla. Must be Board qualified or certified. For information contact Medical Business Consultants, 1101 N.E. 79th St., Suite 205, Miami, Fla. Telephone PL 9-0230.

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LOCATION WANTED: Anesthesiologist. Age 31, Florida license, Male, no service obligation, excellent residence, personable. Prefer private practice in coastal city or town beginning July 1963. Write 69-508, P.O. Box 241, Jacksonville, Fla.

INTERNIST, Board eligible, university trained with subspecialty training in Gastroenterology, desires association in southeast coastal area starting July 1, 1963. Write 69-509, P.O. Box 2411, Jacksonville, Fla.

The Florida Medical Association offers placement assistance through the Physician Placement Service, P.O. Box 2411, Jacksonville 3. This service is for the use of physicians seeking locations, as well as physicians seeking associates.

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Books Received

The following books have been received. Those which appear to be of particular interest will be reviewed as space permits.

Underwater Medicine. By Stanley Miles, M.D., M.Sc., D.T.M. & H., Surgeon Captain, R.N. Pp. 328. Illustrated. Price $10.00. Philadelphia, J. B. Lippincott, 1962.

Doctors, Patients, and Health Insurance. The Organization and Financing of Medical Care. By Herman Miles Somers and Anne Ramsay Somers. Abridged Edition. Pp. 544. Price $1.95. Garden City, N. Y., Anchor Books, Doubleday & Company, Inc., 1962.

Peripheral Vascular Diseases. By Edgar V. Allen, B.S., M.A., M.D., M.S. in Medicine, F.A.C.P., Nelson W. Barker, B.A., M.D., M.S., in Medicine, F.A.C.P., and Edgar A. Hines, Jr., B.S., M.A., M.D., M.S. in Medicine, F.A.C.P., with the assistance of John A. Spittell, Jr., B.S., M.D., M.S. in Medicine, John F. Fairbairn, II, M.D., and John L. Juergens, B.S., M.D., M.S. in Medicine, and Other Associates of the Mayo Clinic and Mayo Foundation. Ed. 3. Pp. 1044. Illus 367. Price $18.00. Philadelphia, W. B. Saunders Company, 1962.

Novak's Gynecologic and Obstetric Pathology with Clinical and Endocrine Relations. By Edmund R. Novak, A.B., M.D., and J. Donald Woodruff, B.S., M.D. Ed. 5. Pp. 713. Illus. 761. Philadelphia, W. B. Saunders Company, 1962.

Surgery of the Chest. Edited by John H. Gibbon, Jr., M.D. Pp. 902. Illustrated. Price $27.00. Philadelphia, W. B. Saunders Company, 1962.

Electrocardiography. Fundamentals and Clinical Application. By Louis Wolff, M.D. Ed. 3. Pp. 351. Illustrated. Price $8.50. Philadelphia, W. B. Saunders Company, 1962.

Correlative Neuroanatomy and Functional Neurology. By Joseph G. Chusid, M.D., and Joseph J. McDonald, M.D. Ed. 11. Pp. 351. Illustrated. Price $8.50. Los Altos, Calif., Lange Medical Publications, 1962.

Curare and Curare-like Agents. Ciba Foundation Study Group No. 12. Editor for the Ciba Foundation A.V.S. de Reuck, M.Sc., D.I.C., A.R.C.S. Pp. 103. Illus. 26. Price $2.95. Boston, Little, Brown and Company, 1962.

The Exocrine Pancreas, Normal and Abnormal Functions. Ciba Foundation Symposium. Editors for the Ciba Foundation, A.V.S. de Reuck, M.Sc., D.I.C., A.R.C.S., and Margaret P. Cameron, M.A. Pp. 390. Illus. 91. Price $11.50. Boston, Little, Brown and Company, 1962.

Pharmacology and Patient Care. By Solomon Garb, M.D., and Betty Jean Crim, R.N., M. Ed. Pp. 334. Price $4.00. New York, Springer Publishing Company, Inc., 1962.



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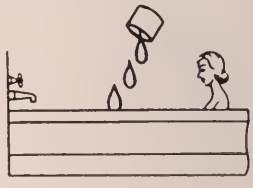
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1. Borota, A., and Grinell, R. N.: J. Amer. Geriatrics Soc., 10:413, 1962. 2. Spoor, H. J.: N. Y. State J. M., 58:3292, 1958. 3. Lubowe, I. I.: Western Med., 1:45, 1960. 4. Weissberg, G.: Clin. Med., 7:1161, 1960. 5. Lieberman, W.: Amer. J. Proctology, 12:374, 1961.

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1. Stevenson, L.E.: M. Ann. District of Columbia *30*:409 (July) 1961.



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Formula: Each 'Eskatrol' *Spansule* sustained release capsule contains Dexedrine® (brand of dextro amphetamine sulfate), 15 mg., and Compazine® (brand of prochlorperazine), 7.5 mg., as the dimaleate.

Recommended Dosage: One 'Eskatrol' *Spansule* capsule daily, taken in the morning.

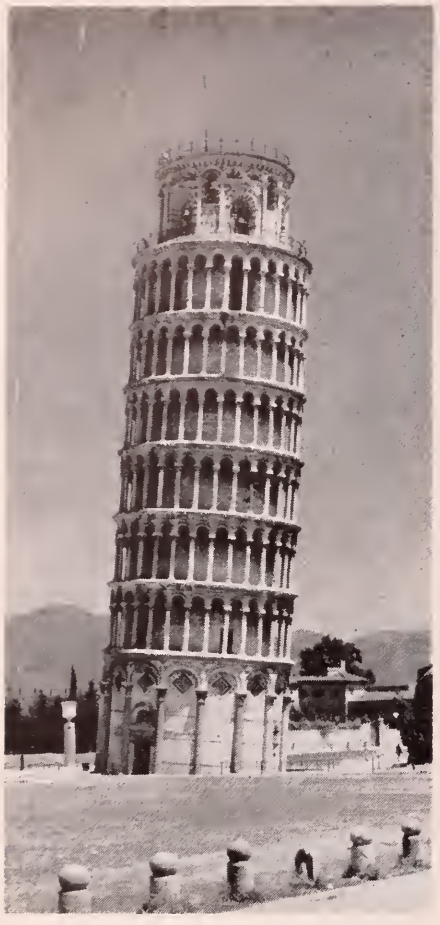
Side Effects: Side effects (chiefly nervousness and insomnia) are infrequent, and usually mild and transitory.

Cautions: Clinical experience has demonstrated that 'Eskatrol' (containing the phenothiazine derivative, prochlorperazine) has a wide margin of safety and that there is little likelihood of blood or liver toxicity or neuromuscular reactions (extrapyramidal symptoms). The physician should be aware, however, of their possible occurrence.

'Eskatrol' *Spansule* capsules should be used with caution in the presence of severe hypertension, advanced cardiovascular disease, or extreme excitability.

Prescribing information adopted Jan. 1961

Smith Kline & French Laboratories



When treatment for

IMPOTENCE

is indicated

ANDROID™ tablets

ANDROGEN-THYROID-COMBINATION

in two convenient dosage forms

ANDROID	ANDROID-H.P. (High Potency)
Each yellow tablet contains:	Each orange tablet contains:
Methyl Testosterone ....2.5 mg.	Methyl Testosterone .....5 mg.
Thyroid Ext. (1/6 gr.) ....10 mg.	Thyroid Ext. (1/2 gr.) ....30 mg.
Glutamic Acid .....50 mg.	Glutamic Acid .....50 mg.
Thiamine HCl .....10 mg.	Thiamine HCl .....10 mg.

INDICATIONS: **Impotence in male.**

AVERAGE DOSE: One tablet three times daily.

AVAILABLE: Bottles of 100 and 500 at your pharmacy.

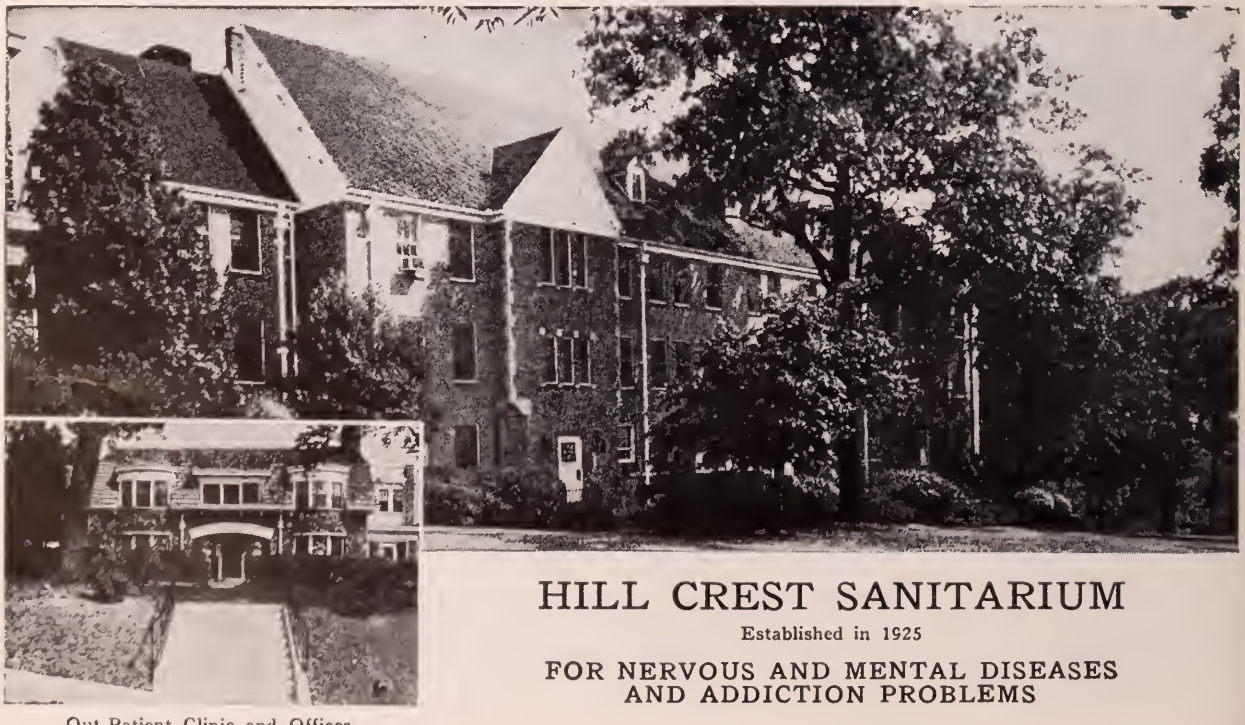
CAUTION: Not to be used when testosterone is contra-indicated. Federal law prohibits dispensing without prescription.

1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

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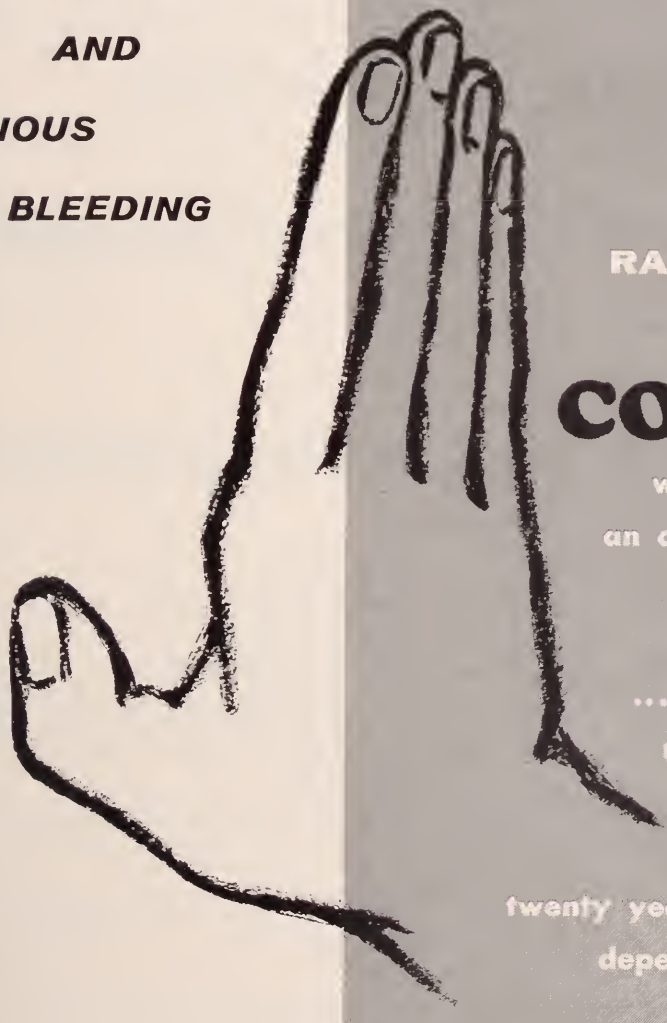
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RAPID EFFECTIVE CONTROL

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SUPPLIED IN 10cc MULTIPLE-DOSE VIALS
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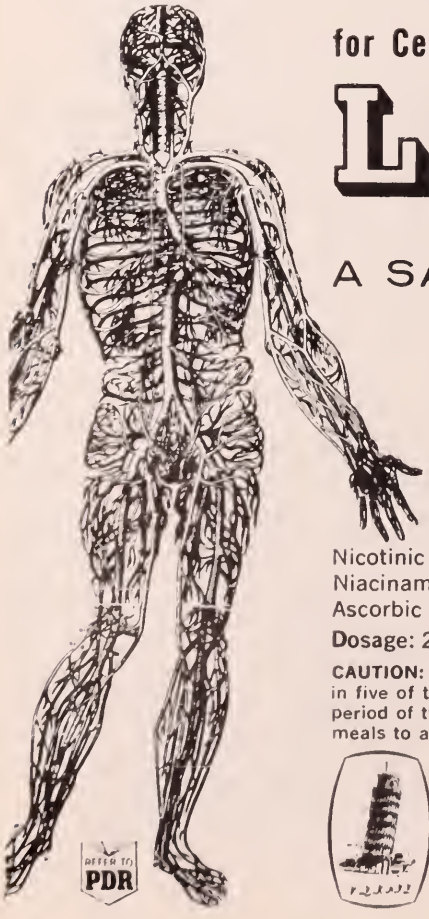
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for Cerebral Sclerosis • Leg Cramps • Cold Feet • Dizzines

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TABLETS

A SAFE AND POTENT **VASODILATOR**

IMPROVED PERIPHERAL CIRCULATION Symptoms such as cold feet, le cramps, inability to walk distances (when due to circulatory disorders) wi show marked alleviation. Ascorbic Acid provides capillary protection s important when using a vasodilator.

The warm, tingling flush which may follow each dose is one of the therapeuti effects that often produce psychologic benefits to the patients.

Each LIPO-NICIN tablet contains:

Nicotinic Acid	250 mg.	Thiamine HCl	25 m
Niacinamide	150 mg.	Riboflavin	2 m
Ascorbic Acid	100 mg.	Pyridoxine HCl	3 m

Dosage: 2 tablets daily • **Available** in Bottles of 100 Tablets

CAUTION: W. B. PARSON, Jr., JAMA, July 30, 1960. Volume 173, No. 13. Demonstrated side reactic in five of the patients when using substantial dosage of Nicotinic Acid. 3.0 to 7.5 grams daily over period of two and one-half years. Suggestion was made that tablets be taken with an anti-acid or wit meals to avoid high acidity in long term therapy. See PDR-page 548.

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THE BROWN PHARMACEUTICAL COMPAN

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Trocinate®

Brand of Thiphenamil HCl.

FOR DIVERTICULITIS, MUCUS COLITIS,

IRRITATIVE DIARRHEA, IRRITATIVE URETERITIS,

BLADDER SPASM

*T*rocinate is a musculotropic antispasmodic with no appreciable anticholinergic action. It relieves spasms of the lower bowel and genito-urinary tract by direct action on the contractile mechanism of smooth muscles. The absence of any appreciable action on the autonomic nervous system eliminates the usual side-effects. It may be safely used in glaucoma. Each tablet contains 100 mgs. Trocinate HCl.

USUAL DOSAGE: 2 tablets, 4 times a day. Maintenance dosage is frequently lower.

Dispensed in bottles of 40 and 250 tablets.

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Manufacturers of ethical pharmaceuticals since 1856



CHELATION — (GR-CHELE: CLAW OR TO HOLD.)

The FIRST Hematinic to Contain BOTH CHELATED IRON and CHELATED MINERALS Assuring a Truly Flavorful, Better Tolerated Iron Therapy.

ADVANTAGES —
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CHELATED IRON-MINERALS and VITAMINS

FORMULA —
Each 5 cc. (one teaspoonful) contains:

Iron (as Ferrous Betaine Citrate)	30 mg.
Cobalt (as Cobaltous Betaine Citrate)	0.1 mg.
Manganese (as Manganese Betaine Citrate)	1.0 mg.
Zinc (as Zinc Betaine Citrate)	1.25 mg.
Magnesium (as Magnesium Betaine Citrate)	6.0 mg.
Vitamin B-1	1.5 mg.
Vitamin B-2	1.2 mg.
Vitamin B-12	6.0 mcg.
Niacinamide	10 mg.
Panthenol	10 mg.

In an exceptionally pleasant tasting base.

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utritional supplementation is basic to postoperative care. herapeutic allowances of B and C vitamins help meet creased metabolic requirements and compensate for ress depletion. STRESSCAPS can set the patient on a ore favorable course and contribute to full recovery. ackaged in decorative "reminder" jars of 30 and 100.

Each capsule contains:	
Vitamin B_1 (Thiamine Mononitrate)	10 mg.
Vitamin B_2 (Riboflavin)	10 mg.
Niacinamide	100 mg.
Vitamin C (Ascorbic Acid)	300 mg.
Vitamin B_6 (Pyridoxine HCl)	2 mg.
Vitamin B_{12} Crystalline	4 mcgm.
Calcium Pantothenate	20 mg.

Recommended intake: Adults, 1 capsule daily, or as directed by physician, for the treatment of vitamin deficiencies.

DERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N. Y. Lederle

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Stress Formula Vitamins Lederle



Put your low-back patient back on the payroll

Soma relieves stiffness —stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, fast!

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (*J.A.M.A. Vol. 172, No. 18, April 30, 1960.*)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. USUAL DOSAGE: 1 TABLET Q.I.D.

The muscle relaxant with an independent pain-relieving action

SOMA®

(carisoprodol, Wallace)

Wallace Laboratories, Cranbury, New Jersey



NEW!

Around the clock relief for

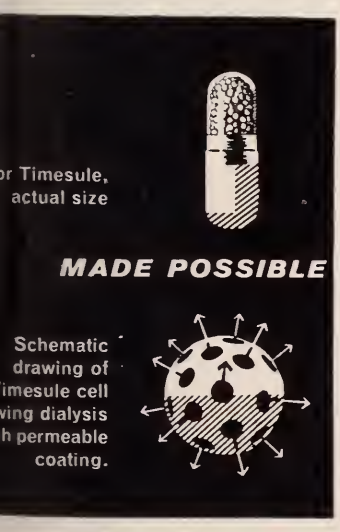
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A NEW COMPREHENSIVE RELIEF

- **Relief usually starts in minutes**—to open nasal passages, stop running nose and eyes, sneezing, wheezing, itching and post-nasal drip
- **Relief usually lasts up to 12 hours** with a single oral dose
- **Gives both** upper respiratory decongestion and bronchodilatation to relieve chest discomfort
- **With minimal** drowsiness, CNS or pressor stimulation



ALSO AVAILABLE:
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Release with the Isoclor Timesule is at a relatively even, constant rate, independent of gastrointestinal motility, pH, or enzymatic activity. Each Timesule pellet is actually a micro dialysis cell, consisting of a drug core with coating of dialyzing membrane of precisely controlled permeability. Approximately 20% of active drugs are released within one hour and 80% in 8 hours. Peaks and valleys of over-release and under-release are minimized for constant, controlled relief with minimum side effects.

EACH ISOCLOR TIMESULE CONTAINS:
Chlorpheniramine maleate ..... 10 mg.
d-Isoephedrine HCl ..... 65 mg.
In a special form providing prolonged therapeutic effect.

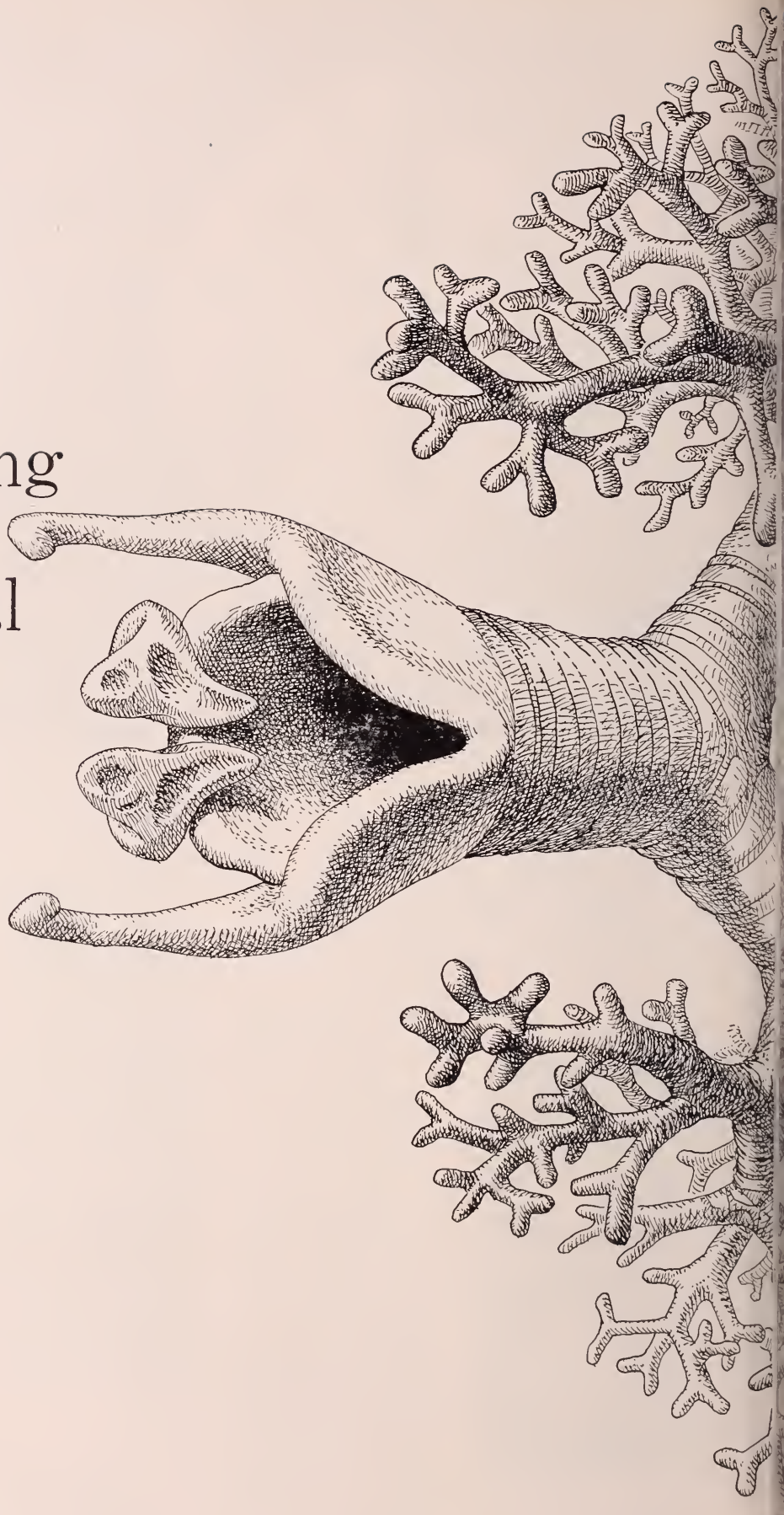
DOSE: Adults: One Timesule every 12 hours, or as directed.

WARNING: Use with caution in patients suffering from hypertension, cardiac disease, hyperthyroidism or diabetes. Patients susceptible to the soporific effect of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

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relief
in bronchial
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nsurpassed for total patient benefits

Aristocort®

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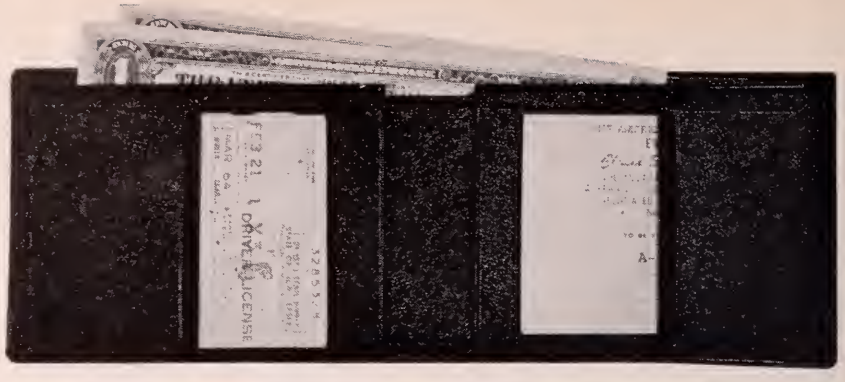


With ARISTOCORT, asthmatic patients obtain sustained relief of wheezing, dyspnea, and spasmodic coughing. It is of particular value in ameliorating severe attacks that may have serious sequelae. With ARISTOCORT, many patients who might otherwise be invalids are able to continue their customary livelihoods or maintain their regular household activities. Yet this symptomatic relief is not often accompanied by the hormonal collateral effects —sodium retention, edema, emotional disturbance, insomnia, voracious appetite— that so often have been a deterrent to steroid therapy.

SUPPLIED: Scored tablets (three strengths); syrup and parenteral. Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

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A Division of
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Diagnosis: Rheumatoid arthritis

Complication: Pocketbook syndrome

New therapy: HEXADROL®

Dexamethasone 'Organon'

The corticosteroid unexcelled in clinical benefits with cost-to-patient greatly reduced

When you prescribe HEXADROL you give your patients all the clinical advantages of the newer, most effective and best-tolerated corticosteroids. At the same time, you provide relief of the Pocketbook Syndrome, a most common complication of therapy with a steroid of choice. This new and unique benefit of important savings to your patients results from Organon leadership in research, development, and new, more efficient manufacturing processes.

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Cost-to-patient? Greatly reduced! Why not check with your local pharmacist on prescription cost to your patients?

Organon



The good life–just what the doctor ordered

and sun are both in his doctor's or- – so is that grapefruit he's eating such gusto. Citrus fruit is a wonder- vay for this patient or any patient to his daily quota of vitamin C . . . to y something good to eat, tasty and fying but not rich.

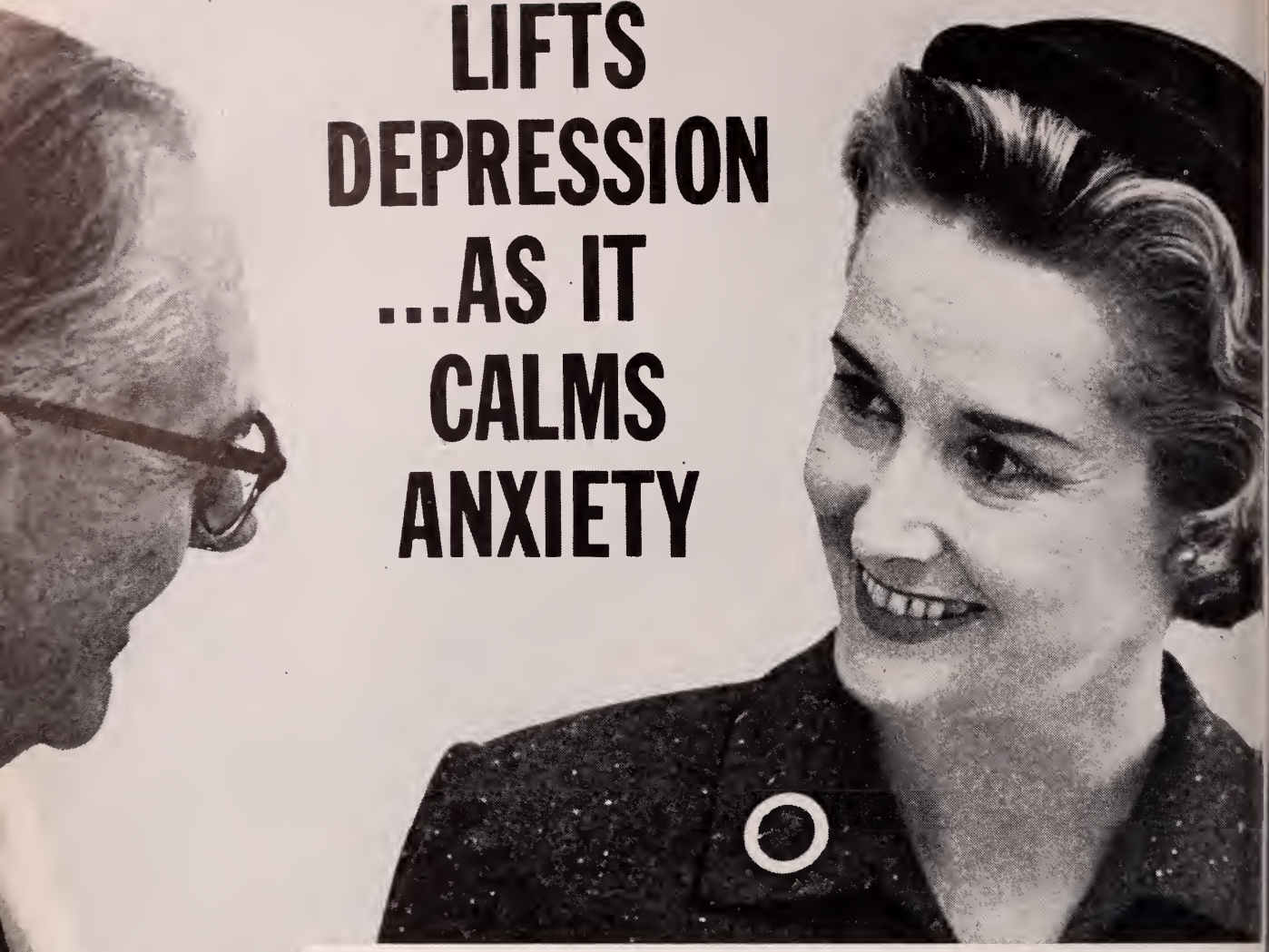
ot all patients are so lucky as to retired to Florida, where they can reach out to pick citrus fruit off their orange and grapefruit trees. But any ent anywhere can get the same bene- fits of the natural vitamin C in Florida oranges, grapefruit, and tangerines . . . thanks to modern methods of processing fresh fruit. Whether it is frozen, canned, or in cartons, 98% of the vitamin C content of the fruit is preserved.

Grapefruit and other citrus fruits filled with vitamin C are valuable in the nutrition of every age group. Among the teen-agers, vitamin C is one of the two nutrients most often low in the diet. Infants, too, need generous amounts of vitamin C; and they will take it readily when it comes to them in the form of delicious orange juice.

When your patient chooses *Florida* citrus, he can be sure of getting fruit filled with natural goodness and of just the right sweetness. Florida citrus is unexcelled because a State commission watches over the entire Florida citrus crop to see that it meets the world's highest standards for fresh, frozen, canned, or cartoned citrus fruits or juices.

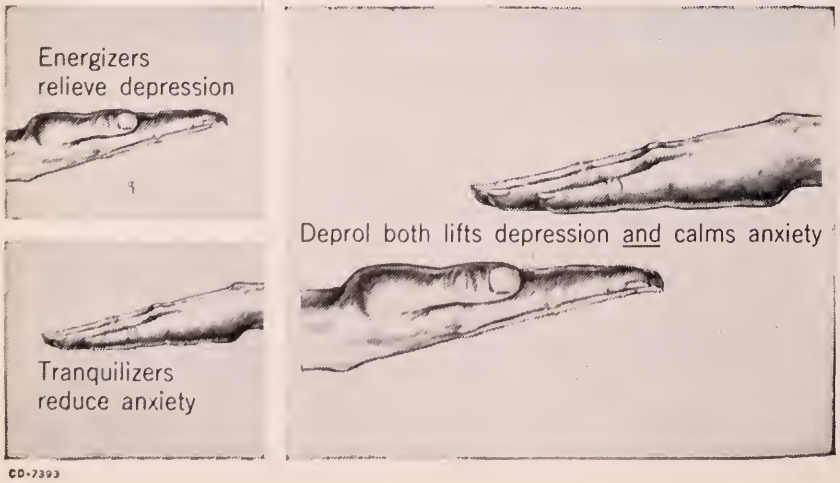
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"I feel like my old self again!" Balanced Deprol therapy has helped relieve her insomnia and fatigue – her normal energy, drive and interest have returned.

Brightens mood...relaxes tension



Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this may be increased gradually up to 3 tablets q.i.d. With establishment of relief, the dose may be reduced gradually to maintenance levels.

Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate.

Supplied: Bottles of 50 light-pink, scored tablets.

Write for literature and samples.

▲Deprol®

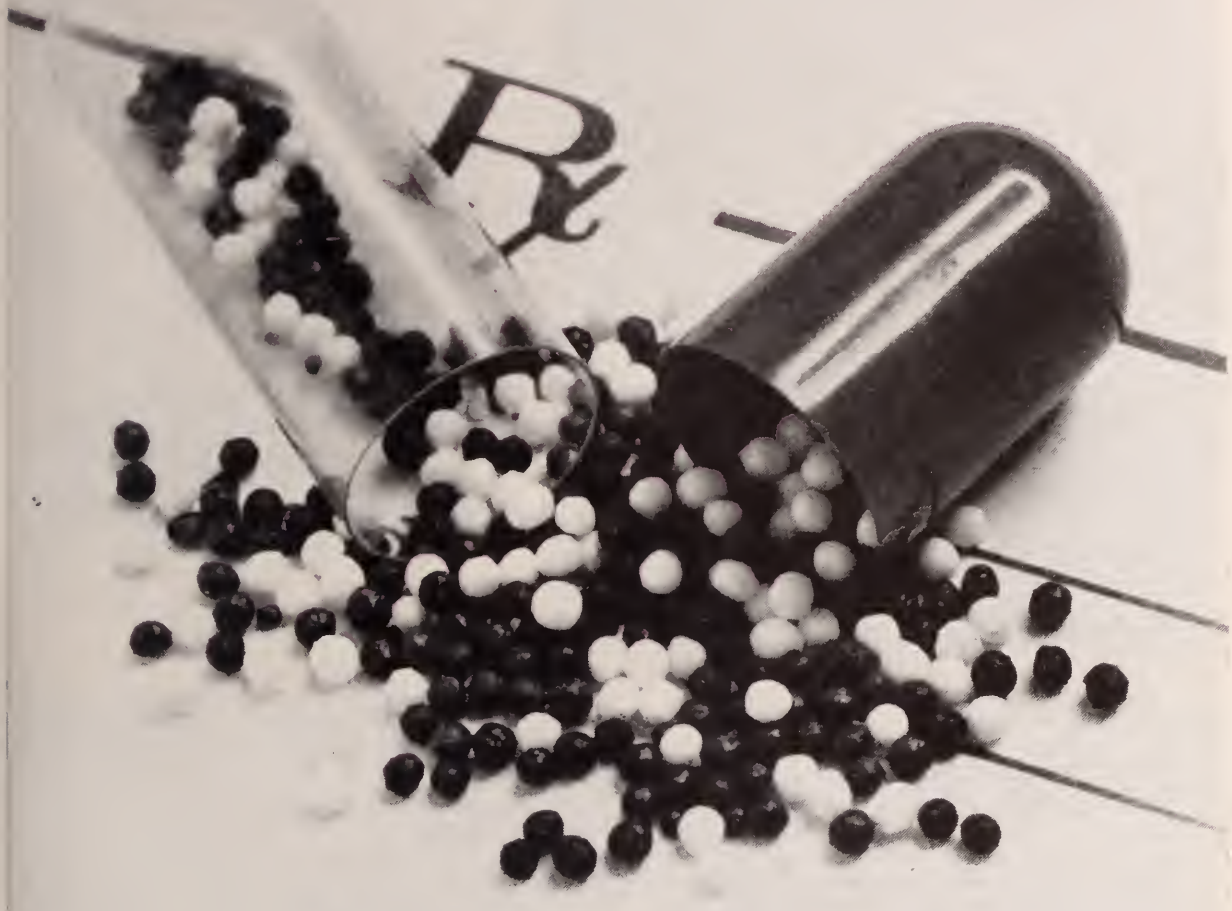
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663 gentle doses of iron in a single capsule, once daily

ONE-IRON™

(capsules of timed-release ferrous fumarate)



the best-tolerated ferrous iron
timed for release in the area of maximum absorption

A single capsule of ONE-IRON—taken once a day by your iron-deficient and even your iron-sensitive patients—sprinkles tiny particles of ferrous fumarate throughout the duodenum and jejunum over a four-hour period for virtually complete and trouble-free absorption.

Not only is maximum hemoglobin regeneration obtained, but the possibility of gastric discomfort, diarrhea or constipation from ionized iron is virtually eliminated.

Moreover, ferrous fumarate itself (the sole active ingredient of ONE-IRON) is better tolerated than ferrous sulfate, succinate or gluconate.[1-3]

Each timed-release ONE-IRON capsule provides ferrous fumarate, 325 mg. (5 grs.), equivalent to 107 mg. of elemental iron.

Dose—one capsule daily with breakfast.

Supplied—bottles of 100 and 1,000 clear and white capsules.

References: 1. Berenbaum, M.C. et al.: Blood 15:540, 1960. 2. Shapleigh, J.B. and Montgomery, A.: Am. Prac. & Digest Treat. 10:461, 1959. 3. Swan, H.T. and Jowett, G.H.: Brit. M.J. 2:782 (Oct. 24) 1959.

HART LABORATORIES
Division of A. J. Parker Co.
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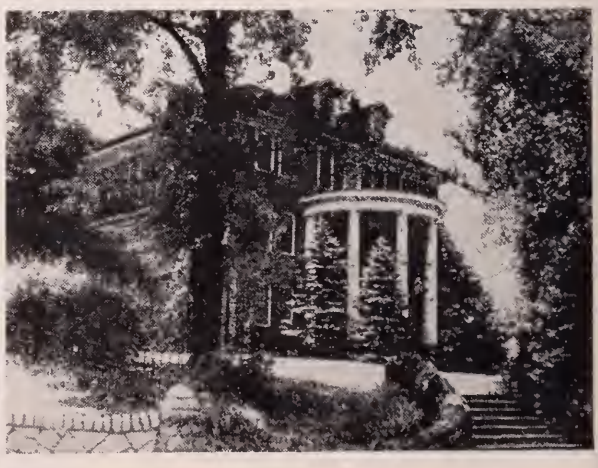
Coca-Cola, too, is compatible with a well balanced diet. As a pure, wholesome drink, it provides a bit of quick energy ... brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

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The Hospital is located in a 75-acre park, amid the scenic beauties of the Smoky Mountain Range of Western North Carolina, affording exceptional opportunity for physical and emotional rehabilitation.

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Logical support for the atherosclerosis diet

A recent report* in the *JAMA* on atherosclerosis states, "...it appears logical to attempt to reduce high concentrations of cholesterol and other serum lipids as an experimental therapeutic procedure."

Since this report recognizes table spreads as an important source of dietary fat, it is in your professional interest to know about the fatty-acid composition of the margarines from Mrs. Filbert's.

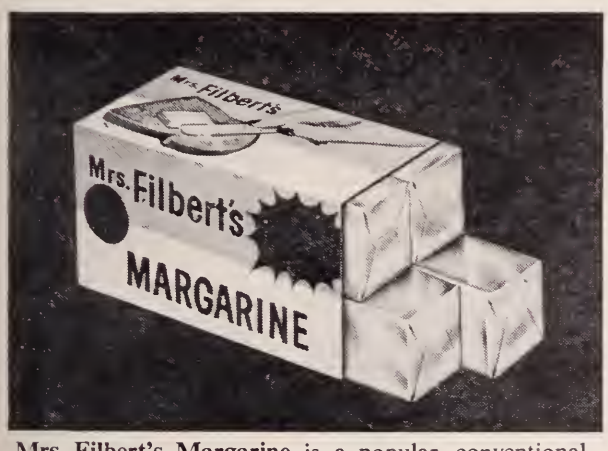
Each of Mrs. Filbert's Margarines is over 80% unsaturated and offers unique properties useful in the control of serum lipids by dietary means.

Moreover, when you recommend any one of Mrs. Filbert's Margarines, your patient is assured of unmatched taste and flavor satisfaction—an important consideration in promoting adherence to any therapeutic regimen.

*AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181: 411-423 (August 4, 1962).



Mrs. Filbert's Corn Oil Margarine is made from 100% corn oil, over 50% of which retains its *liquid* characteristics. Because of its high linoleic content, its ratio of polyunsaturates to saturates exceeds 1.5 to 1 . . . and equals the highest level available today in *any* corn oil margarine. Of the total fatty-acid content, 28% is cis-cis linoleic acid. Thus, it can be most useful in a program for reducing serum cholesterol levels.



Mrs. Filbert's Margarine is a popular, conventional-type margarine with no premium price. It is made from the finest domestic vegetable oils, which are partially hydrogenated for texture, but remain over 80% unsaturated. It has a ratio of polyunsaturates to saturates in excess of 1 to 1. Of the total fatty-acid content, 7% is cis-cis linoleic acid.



Mrs. Filbert's Whipped Margarine contains the same number of calories per pound as ordinary margarine, but contains 30% *fewer calories per pat* because it is whipped. When spread normally, it provides satisfaction with a reduction in fat calories. And its ratio of polyunsaturates to saturates exceeds 1 to 1. Of the total fatty-acid content, 7% is cis-cis linoleic acid.

If you would like information about Mrs. Filbert's family of margarines—including detailed listings of their component characteristics—please write us.

J. H. FILBERT, Inc.

Baltimore 29, Maryland



Marvelous low-residue meal—consommé, molded flaked fish, farina-plum pudding—and beer!

How to help your patient stick to a low-residue diet

What could be more acceptable to the patient who's tired of his low-residue diet than some truly appetizing dishes?

Consommé is delicious served jellied or hot. Eggs can be soft or hard-cooked by simmering. Flaked fish molded in lemon gelatin looks inviting.

For delicious "burgers," just moisten chopped beef with broth and mix in bread crumbs. Puréed vegetables, folded into well-beaten eggs (yolks and whites) and baked, make delectable "soufflés."

For a unique and delicious salad, try split bananas over cottage cheese, top with puréed apricots. For taste-tempting parfaits—alternate layers of farina pudding and puréed plums.



And a glass of beer can add zest to your patient's diet

pH-4.3,
104 Cal. / 8 oz. glass
(Average of American Beers)

United States Brewers Association, Inc.

For reprints of this and 11 other diet menus, write us at 535 Fifth Avenue, N.Y. 17, N.Y.

For your elderly patients...

an effective GERIATRIC antiarthritic with distinctive Safety Factors

When arthritis afflicts the elderly, it often poses a critical problem in the choice of an effective antiarthritic that will not aggravate other common geriatric conditions . . . such as osteoporosis, hypertension, edema, hyperglycemia, peptic ulcer, renal, cardiac or hepatic damage, latent chronic infection, or emotional instability.

Pabalate-SF, the geriatric antiarthritic, is specially indicated for such patients.

As Ford and Blanchard have reported,[1] Pabalate-SF has "a pronounced antirheumatic effect in the majority of patients with degenerative joint diseases." It produces "a more uniformly sustained [salicylate blood] level for prolonged analgesia and, therefore, is superior to aspirin in the treatment of chronic rheumatic disorders."

Yet Pabalate-SF is marked by distinctive **safety factors:** its potassium salts cannot contribute to sodium retention . . . its enteric coating assures gastric tolerance . . . and its clinical record reflects none of the serious reactions frequently precipitated by therapy with corticosteroids or pyrazolone derivatives. **It has no contraindications except personal idiosyncrasy.**

1 Ford, R. A., and Blanchard, K: Journal-Lancet 78:185, 1958.

Formula: In each persian-rose enteric-coated tablet: potassium salicylate 0.3 Gm., potassium para-aminobenzoate 0.3 Gm., ascorbic acid 50.0 mg.

Also available:
PABALATE, when sodium salts are permissible.
PABALATE-HC, for conservative steroid therapy.

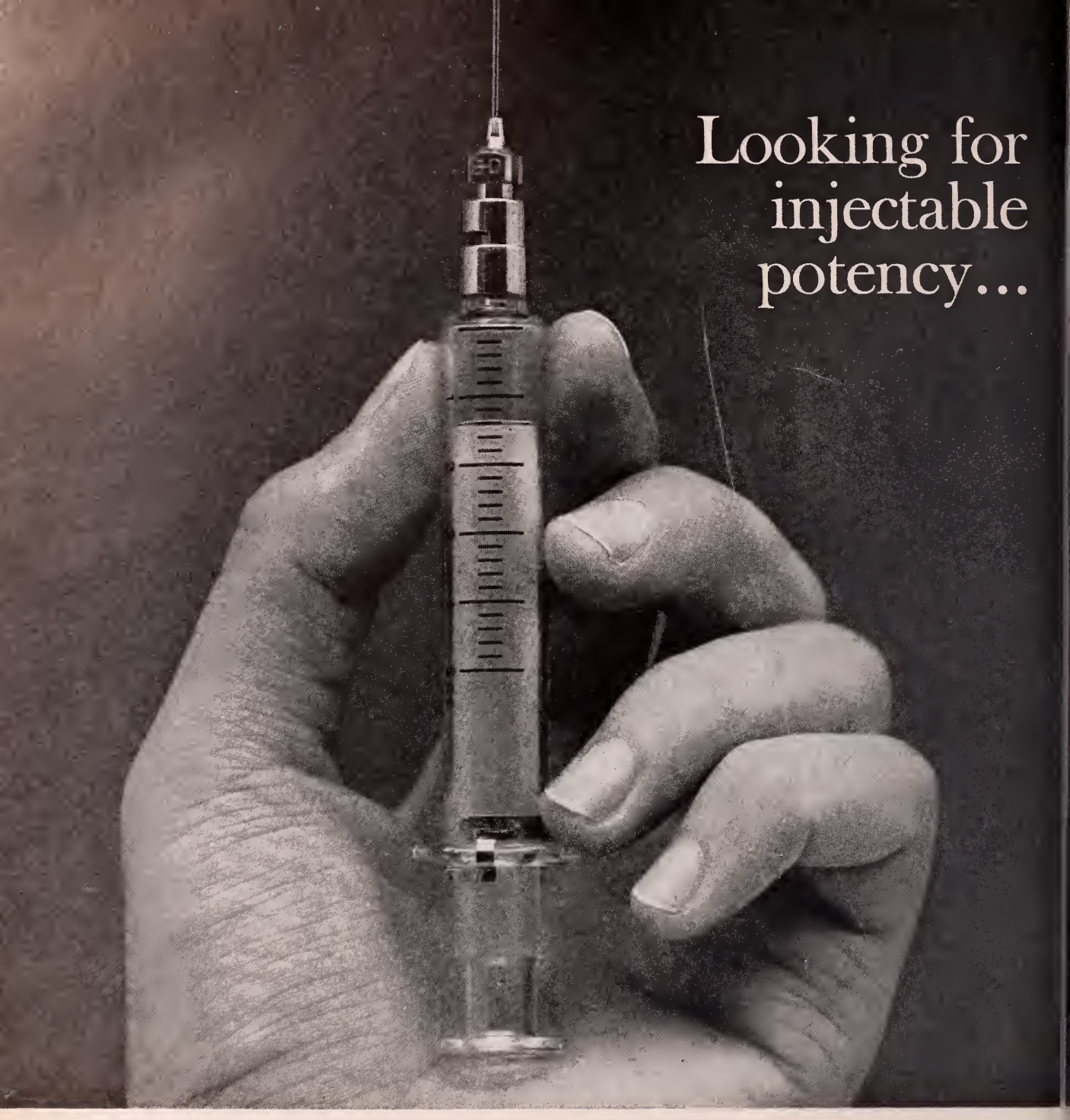
A. H. ROBINS CO., INC. · Richmond, Virginia

Robins

Pabalate®-SF

—the new, convenient way to prescribe **PABALATE-SODIUM FREE**





FILMTAB®

SURBEX-T® provides therapeutic B-complex with 500 mg. of C

...in
ORAL
form?



Patients receive replenishment in the easiest possible manner when the water soluble vitamins are depleted, or demands are increased.

Each Filmtab® Surbex-T represents:

Thiamine Mononitrate (B_1)	15 mg.
Riboflavin (B_2)	10 mg.
Nicotinamide	100 mg.
Pyridoxine Hydrochloride	5 mg.
Cobalamin (Vitamin B_{12})	4 mcg.
Calcium Pantothenate (as calcium pantothenate racemic)	20 mg.
Ascorbic Acid (C) (as sodium ascorbate)	500 mg.
Desiccated Liver, N.F.	75 mg.
Liver Fraction 2, N.F.	75 mg.

...and when needs are more moderate, SUR-BEX® with C, Abbott's improved B-complex formula with 250 mg. of C.

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Filmtab—Film-sealed tablets. Abbott: U.S. Pat. No. 2,881,085



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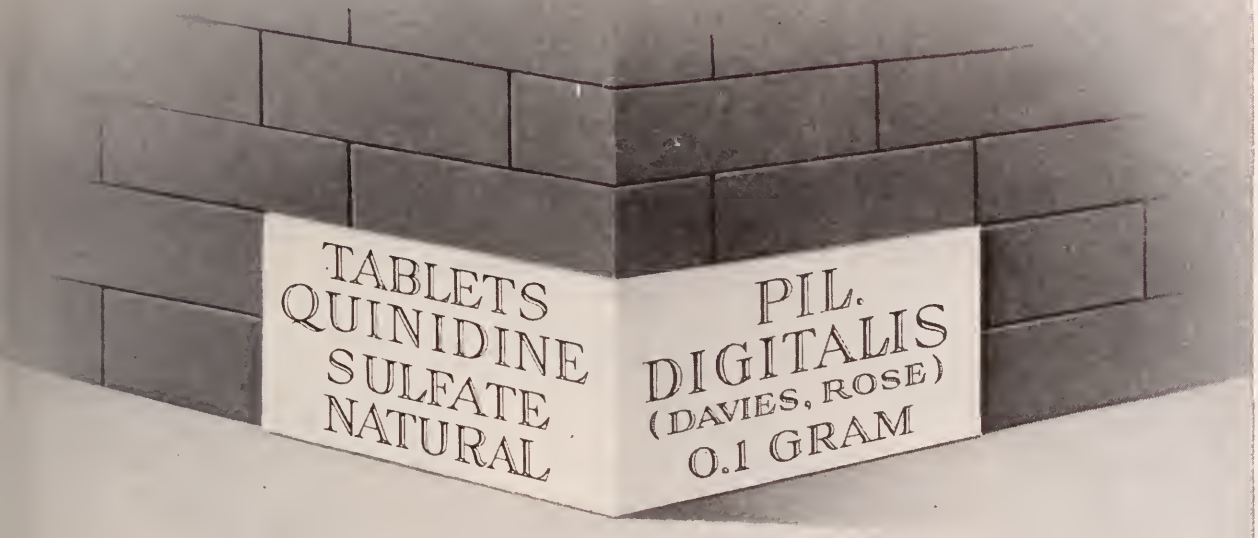
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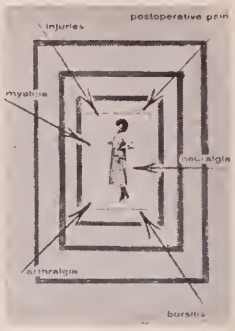
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**Bradford, Gilchrist, Union*					
Bay	Henry C. Smallwood, Panama City	Theodore G. Elchos, Panama City	1st Tues.		32
Brevard	Joseph C. Von Thron, Cocoa Bch.	Benj. F. Knotts, Cocoa Bch.	1st Tues.	5	97
Broward	Curtis D. Benton Jr., Ft. Lauderdale	Yale Citrin, Hollywood	4th Tues.	45	312
Charlotte	Stephen R. Roddy, Punta Gorda	Arno von Ruckteschell, Punta Gorda	2nd Tues.		7
Clay	John M. Malone, Green Cove Spgs.	Aubrey Y. Covington, Green Cove Spgs.			8
Collier	Daniel B. Langley, Naples	Ethel H. Trygstad, Naples	4th Tues.		15
Columbia	Louis G. Landrum, Lake City	Thomas H. Bates, Lake City	3rd Wed.		15
**Baker*					
Dade	James L. Anderson, Miami	Geo. W. Robertson, Miami	1st Tues.	121	1169
DeSoto-Hardee-Glades	Elmer J. Schmierer, Arcadia	Calvin W. Martin, Arcadia	1st Tues.		18
Duval	Thomas M. Irwin, Jacksonville	Robert J. Brown, Jacksonville	1st Tues.	39	356
Escambia	Joseph L. Rubel, Pensacola	Leonard F. Hattaway, Pensacola	2nd Tues.	3	121
Franklin-Gulf	Harold B. Canning, Wewahitchka	Photis J. Nichols, Apalachicola	Last Wed.		6
Highlands	Carl J. Larsen, Avon Park	C. Brooks Henderson, Avon Park	3rd Mon.	4	19
Hillsborough	Samuel G. Hibbs, Tampa	Frank A. Massari, Tampa	1st Tues.	4	283
Indian River	Hampton L. Schofield Jr., Vero Beach	Charles C. Flood, Vero Beach	2nd Tues.		18
Jackson-Calhoun	Redden L. Miller, Graceville	Francis M. Watson, Marianna	Quarterly		17
Lake	Thomas D. Weaver, Clermont	Argin A. Boggus Jr., Tavares	1st Wed.	2	38
Lee-Hendry	Thomas M. Wiley Jr., Ft. Myers	Charles C. Donegan Jr., Ft. Myers	3rd Mon.		48
Leon-Gadsden-Liberty Wakulla-Jefferson	H. Lawrence Smith, Tallahassee	Thomas J. Bixler, Tallahassee	1st Mon.	12	83
Madison	Royce V. Jackson, Madison	Julian M. Durant, Madison	1st Tues.	1	5
Manatee	William D. Sugg, Bradenton	James A. Morrish, Bradenton	2nd Tues.	3	48
Marion	John P. Moore, Ocala	Edwin H. Updike II, Ocala	3rd Tues.	3	35
**Levy*					
Monroe	James D. Malgrat, Key West	John M. Cammarata, Key West	1st Thurs.		23
Nassau	Henry B. Dickens Jr., Fernandina Bch.	John B. Britton, Fernandina Bch.	1st Thurs.	3	9
Orange	Robert W. Curry, Orlando	Truett H. Frazier, Orlando	3rd Wed.	43	262
**Osceola*					
Palm Beach	James F. Cooney, W. Palm Beach	Taufick E. Bendick, W. Palm Beach	4th Mon.	21	226
Pasco-Hernando-Citrus	Dwayne L. Deal, Dade City	W. Wardlaw Jones, Dade City	2nd Thurs.	1	23
**Sumter*					
Pinellas	John P. Ferrell, St. Petersburg	William J. Dean, St. Petersburg	1st Mon.	20	348
Polk	Clarence L. Anderson, Lakeland	Albert G. King Jr., Lakeland	2nd Wed.	15	142
Putnam	Fairfax E. Montague, Palatka	James R. Sayers, Palatka	2nd Tues.		15
St. Johns	James J. De Vito, St. Augustine	William W. O'Connell, St. Augustine	3rd Tues.		20
St. Lucie-Okeechobee-Martin	Richard Q. Penick, Jensen Beach	Maltby F. Watkins, Fort Pierce	3rd Thurs.		34
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Seminole	Charles L. Park Jr., Sanford	Thomas L. Largen, Sanford	2nd Tues.		18
Suwannee-Hamilton-Lafayette	William P. Blackmon, Jasper	James F. Dietrich, Live Oak	1st Sat.		7
Taylor	Walter J. Baker, Foley	John A. Dyal Jr., Perry	Last Fri.		6
**Dixie*					
Volusia	John J. Cheleden, Daytona Beach	Thomas W. Ayres, Daytona Beach	2nd Tues.	6	104
**Flagler*					
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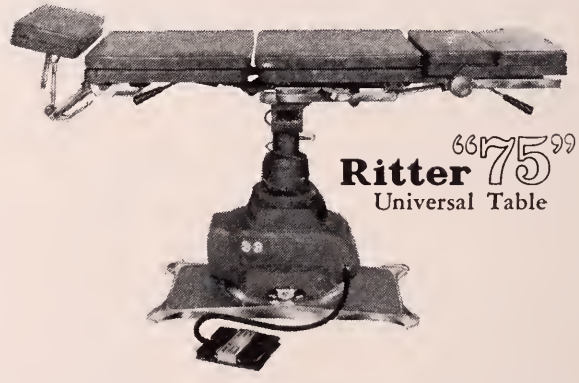
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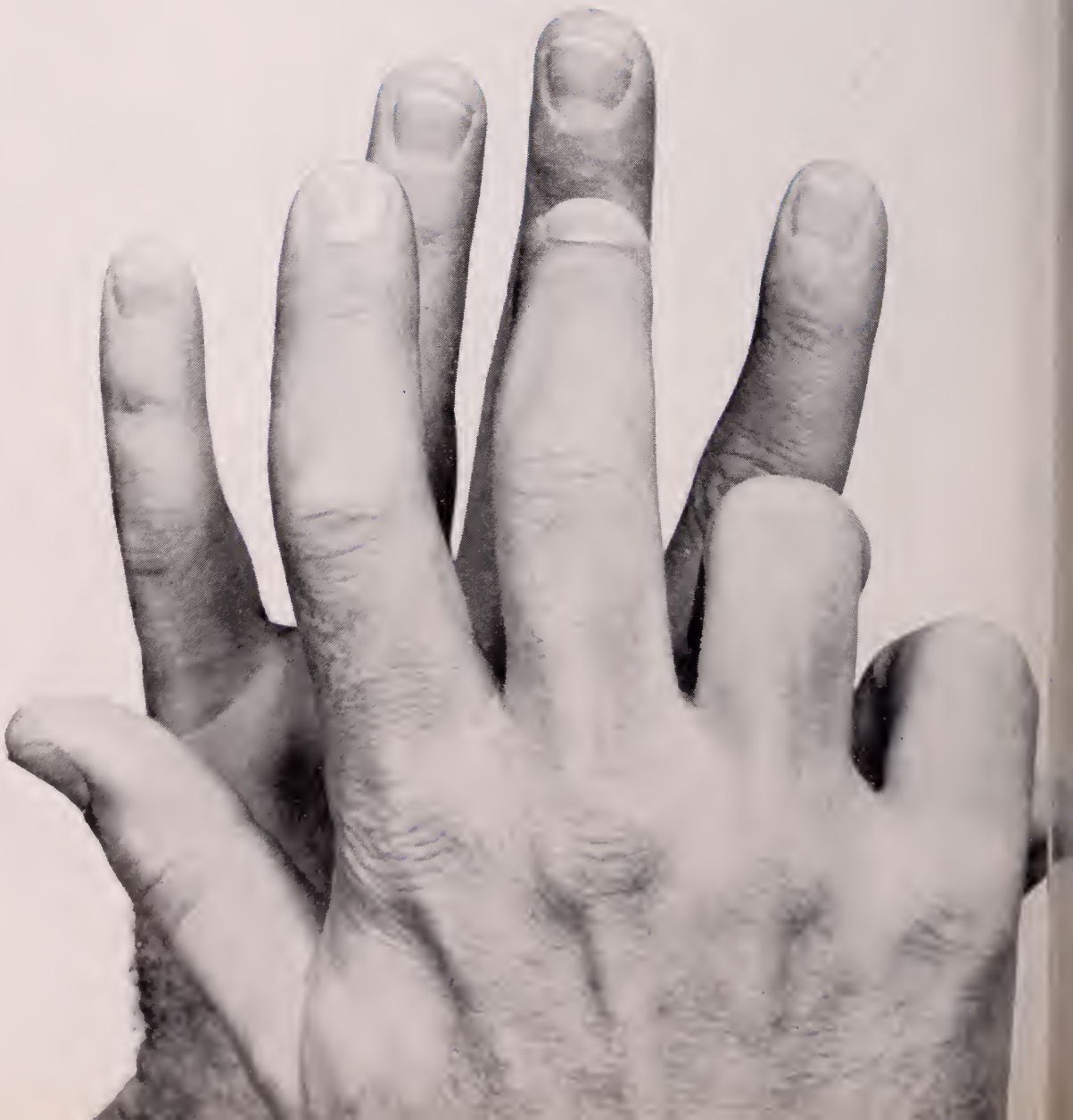
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eferences: (1) Thacher, H. C.; & Fishman, L.: *J. Maine M. A.* **52**:84, 1961. (2) Hopkins, E. W.: *Postgrad. Med.* 29:451, 1961.) Hall, W. H.: *M. Clin. North America* **43**:191, 1959. (4) Krugman, S.: *Pediat. Clin. North America* 8:1199, 1961. (5) Ede, S.; avis, G. M., & Holmes, F. H.: *J.A.M.A.* **170**:638, 1959. (6) Wolfsohn, A. W.: *Connecticut Med.* **22**:769, 1958. (7) Calvy, G. L.: *ew England J. Med.* **259**:532, 1958. (8) Hendren, W. H., III, & Haggerty, R. J.: *J.A.M.A.* **168**:6, 1958. (9) Cutts, M.: *Rhode Island M. J.* **43**:388, 1960. (10) Berman, W. E., & Holtzman, A. E.: *California Med.* 92:339, 1960. (11) Vetto, R. R.: *J.A.M.A.* **173**:990, 1960. (12) Sia, C. C. J., & Brainard, S. C.: *Hawaii M. J.* **17**:339, 1958. (13) Rosenthal, I. M.: *GP* **17**:77 (March) 1958. (14) Gaisford, W.: *Brit. M. J.* **1**:230, 1959.

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Volume XLIX, Number 7, January 1963

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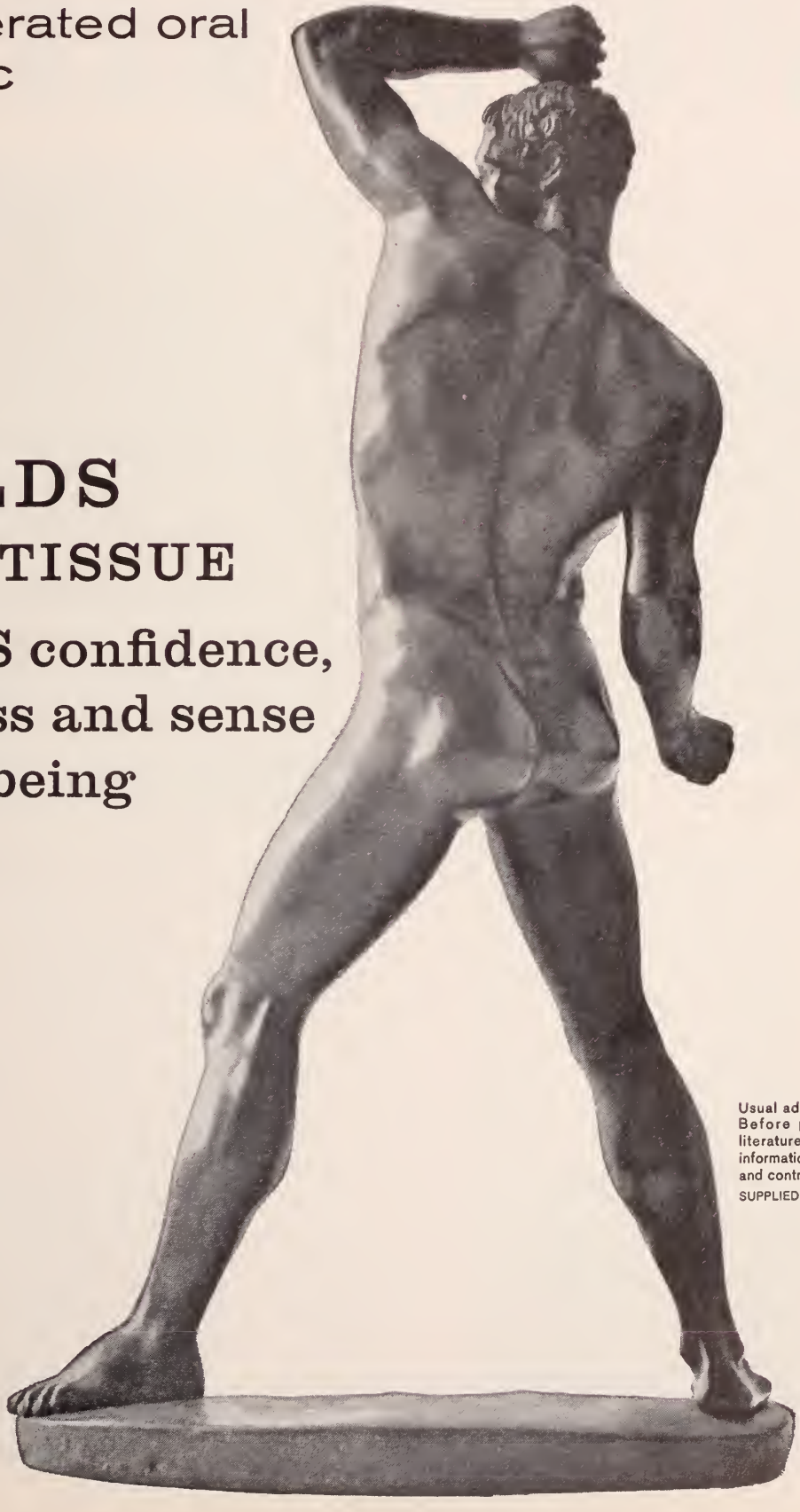
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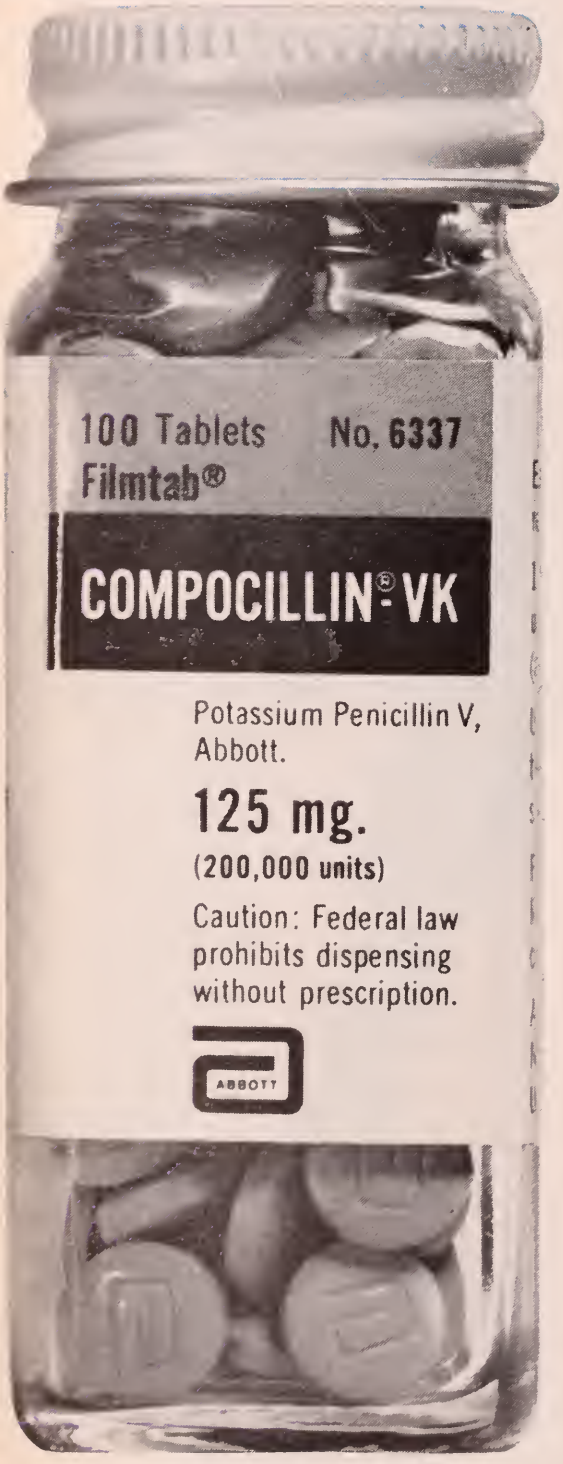
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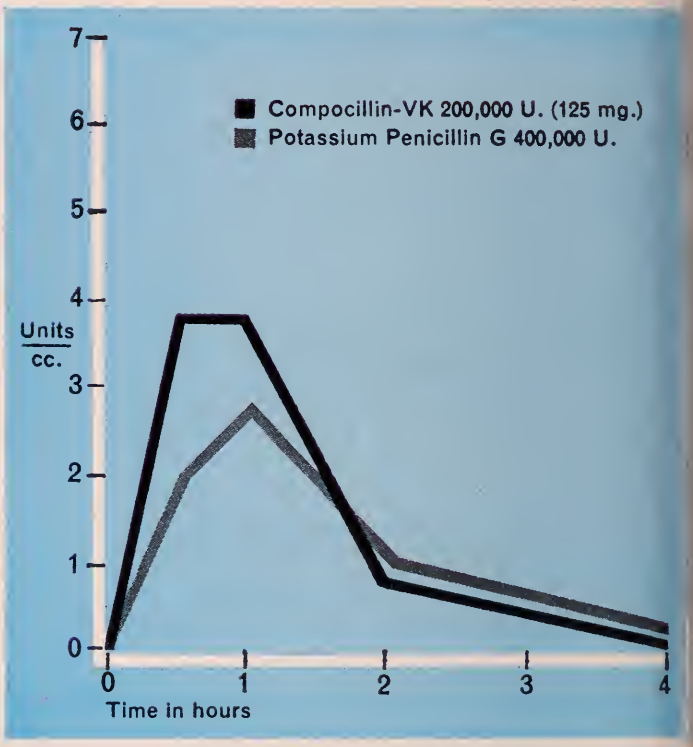
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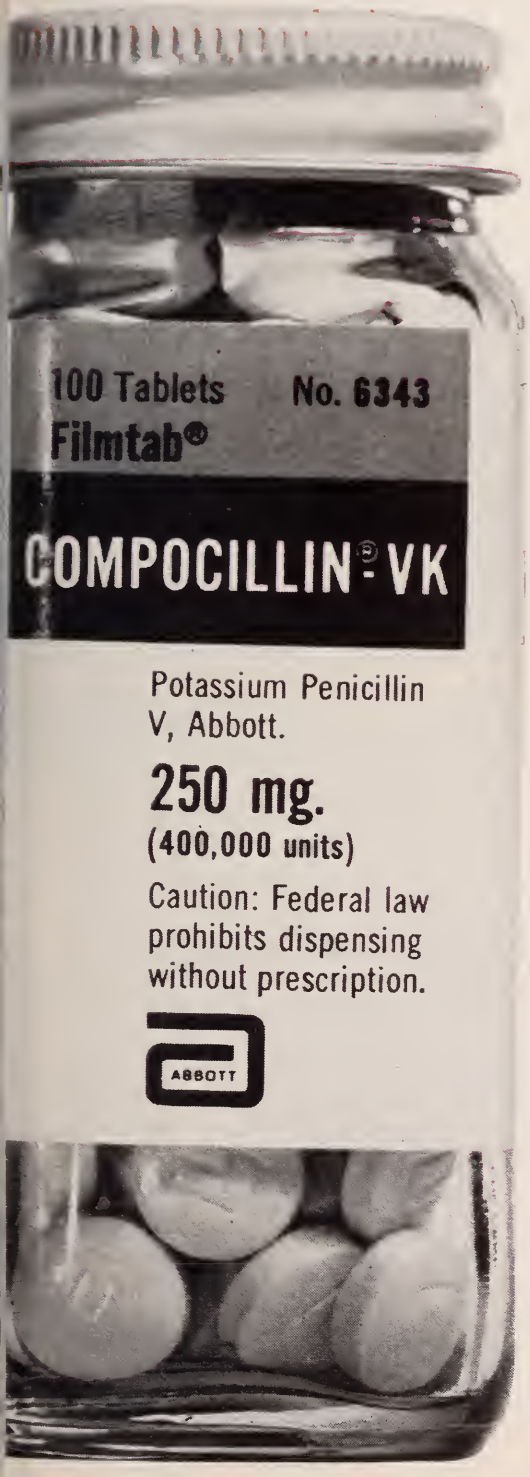
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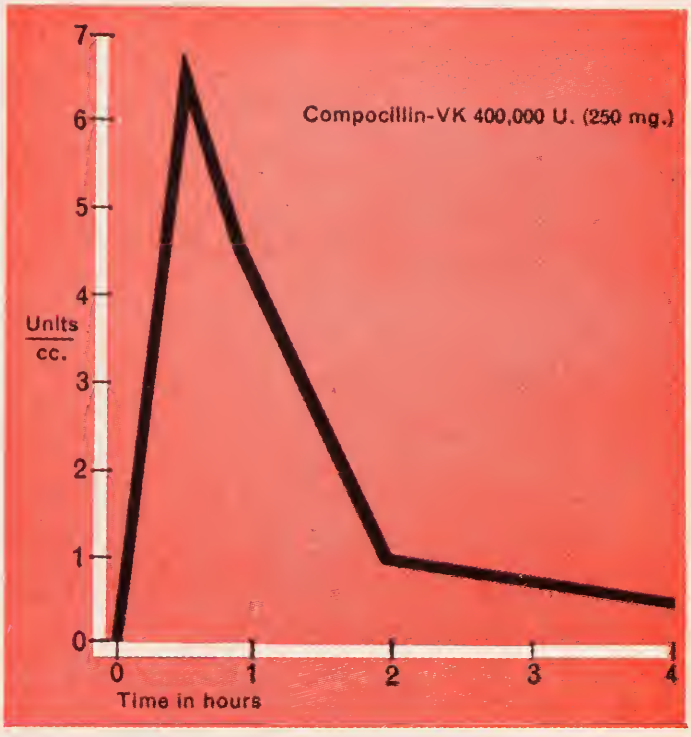
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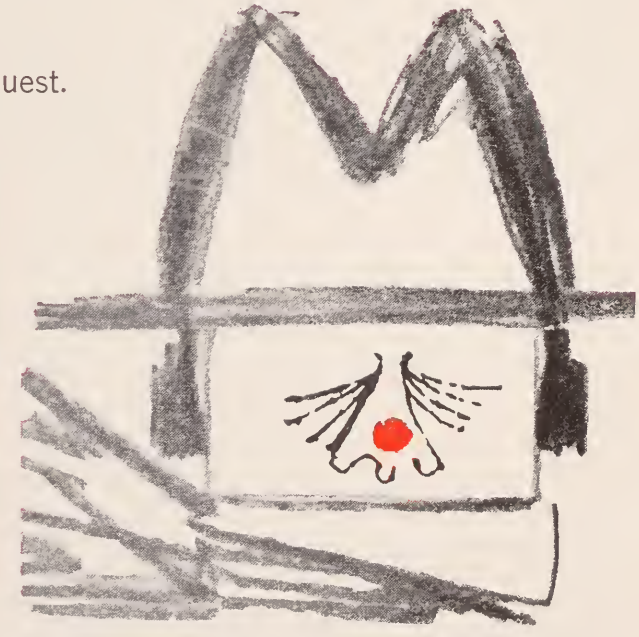
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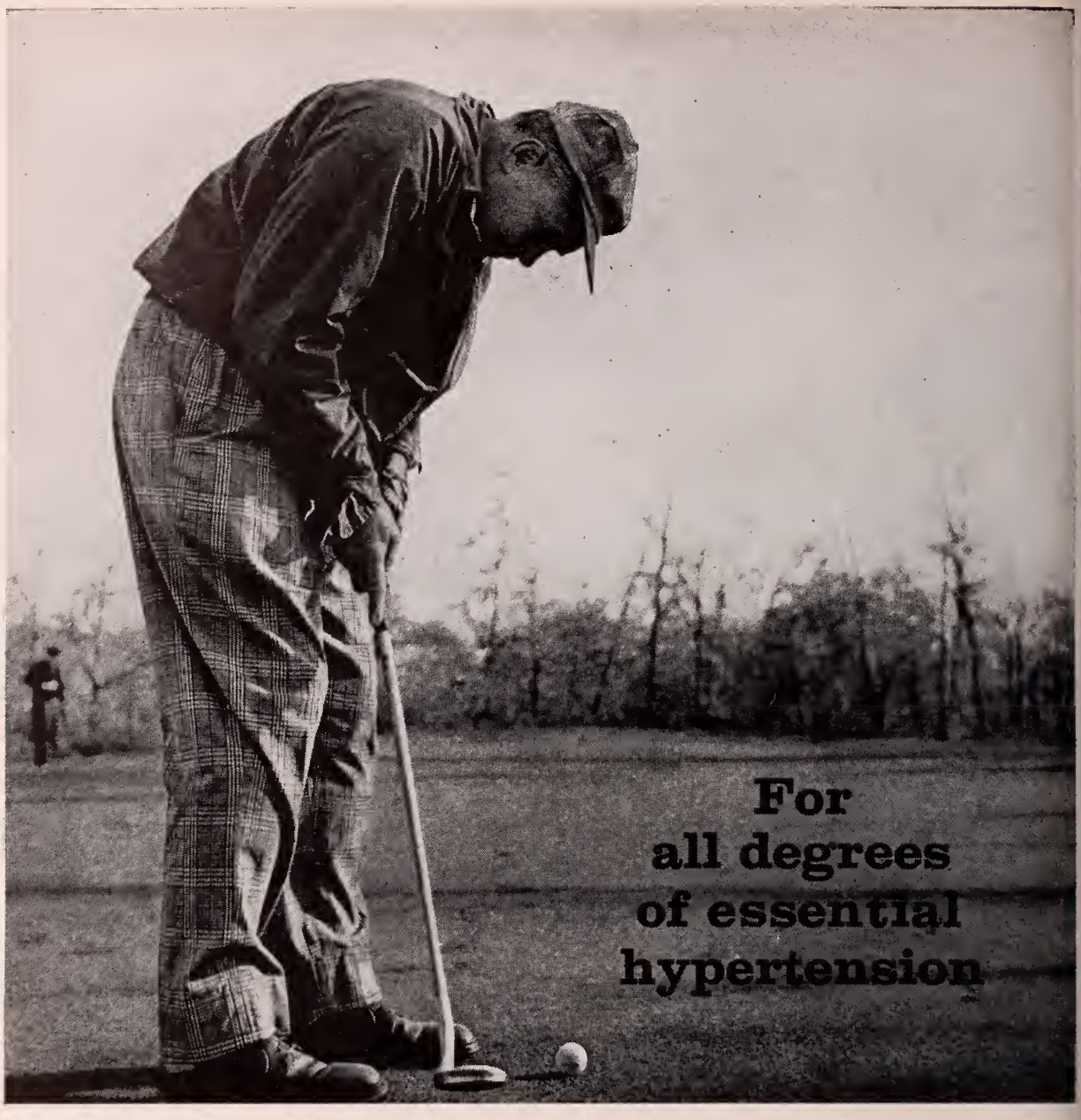
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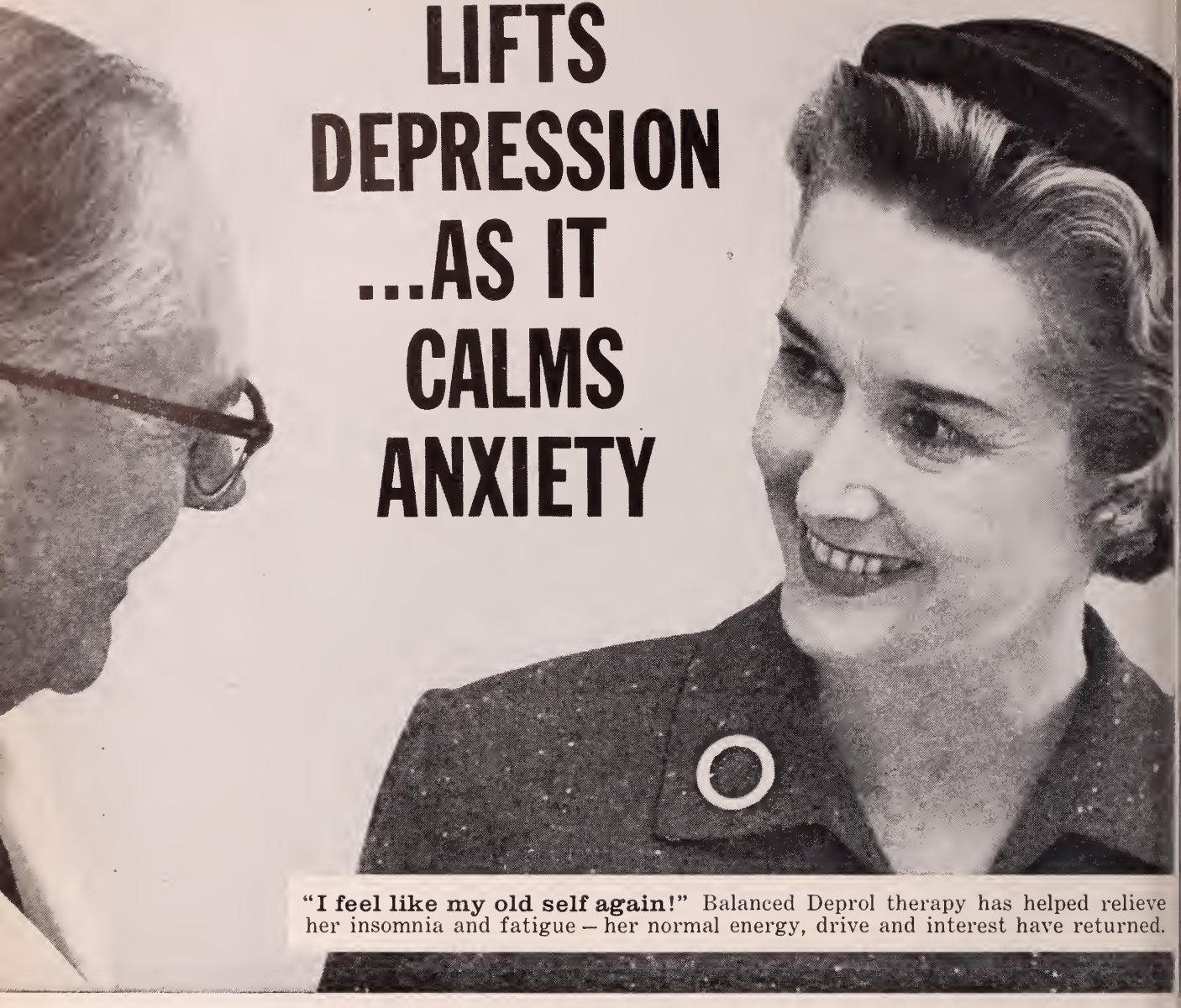
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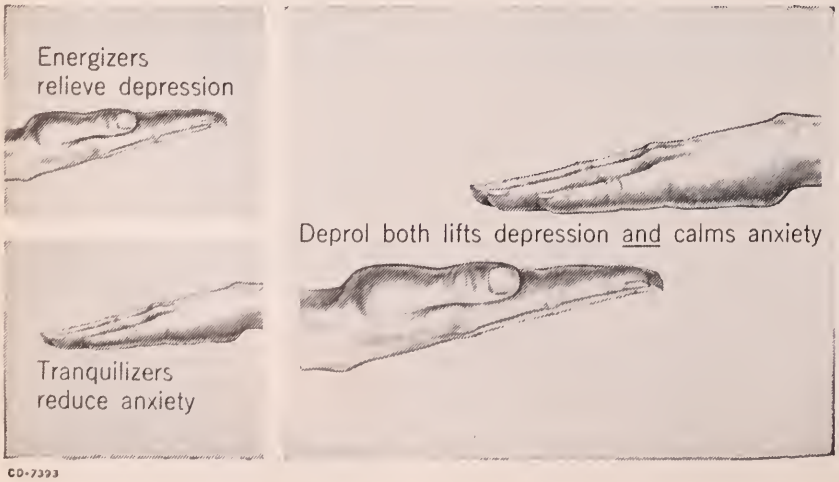
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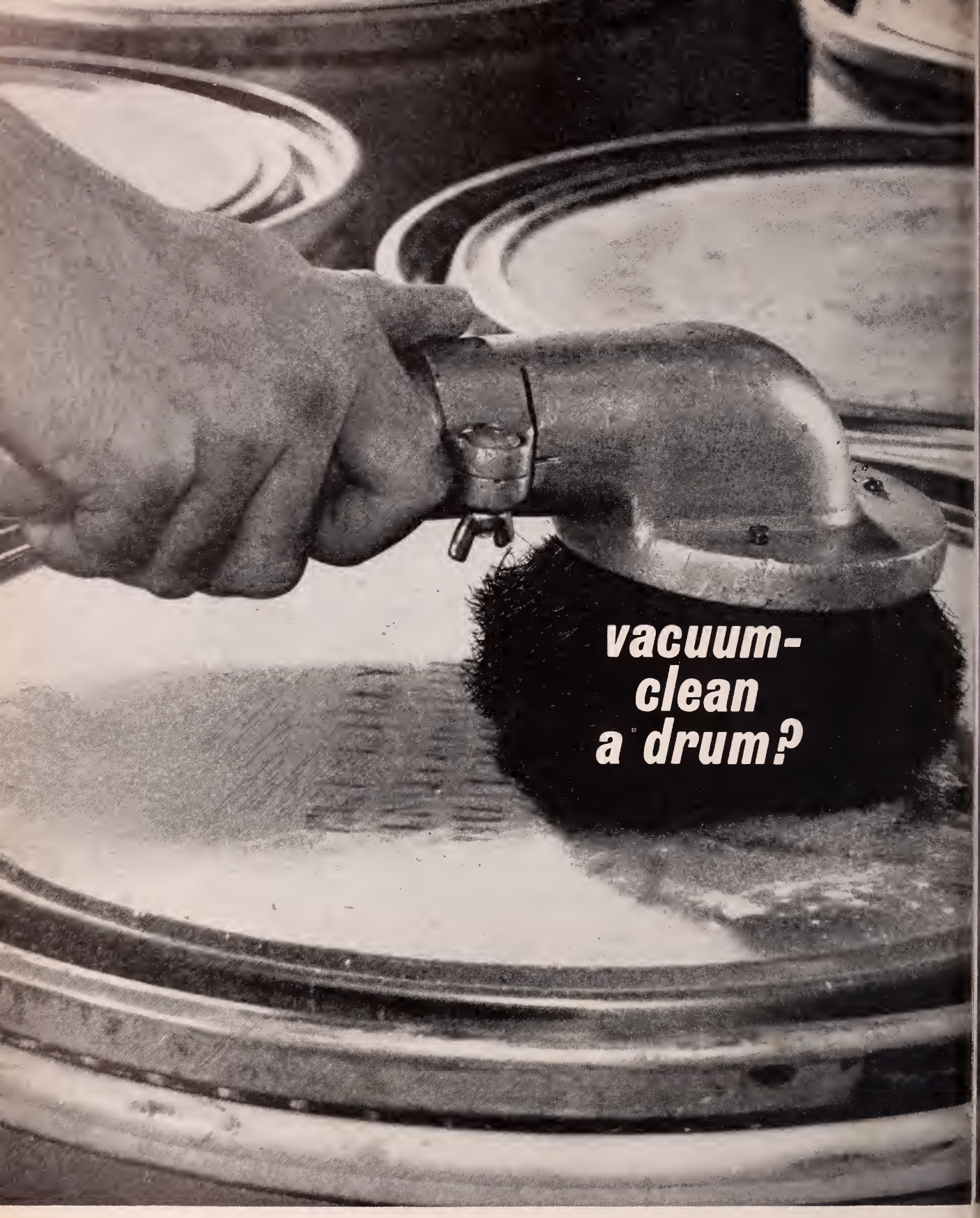
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Treatment and Diagnosis of Toxoplasmosis

Herbert E. Kaufman, M.D.
GAINESVILLE

Toxoplasma gondii is an obligate intracellular parasite discovered in 1908 by Nicolle and Manceaux[1] in an African rodent, Ctenodactylus gondii, and in the same year by Splendore[2] in a Brazilian rabbit. In 1923 the first indication that toxoplasmas might infect man was provided by Jankü,[3] an ophthalmologist, who described organisms similar to Toxoplasma in the eye of a newborn child dead of hydrocephalus. Not until 1939, however, was the organism definitely proved to cause diseases in man. At this time Wolf, Cowen and Paige[4] isolated it from neonatal infants with the syndrome they showed to be caused by toxoplasmosis, and shortly after this demonstration of congenital infection, Sabin[5] and Pinkerton and Weinman[6] showed the organism to cause systemic disease in adults. Frenkel,[7] Wilder,[8] and Jacobs, Fair and Bickerton[9] subsequently demonstrated that it was an important cause of uveitis and they and others have provided evidence that ocular toxoplasmosis is probably the most common type of symptomatic adult infection.

Although the organism is an obligate intracellular parasite, it invades almost any type of nucleated cell of man or warm-blooded animals and grows readily in tissue cultures of almost any origin. A crescentic protozoan, T. gondii is 3 to 4 microns wide and 6 to 7 microns long in its proliferative form (fig. 1). This proliferative form is easily killed by desiccation, temperature, or gastric juice, but in addition to the proliferative phase the organism forms cysts (figs. 2 and 3) which contain organisms more resistant to gastric juices and other influences (figs. 2 and 3). These cysts are commonly more than 20 microns in diameter, and their walls appear to be a combination of material from the host cell and products of the organism. Encysted organisms are rich in glycogen and are stained brilliantly by stains such as PAS.

Associate Professor and Head of the Division of Ophthalmology, University of Florida College of Medicine.

Clinical Syndromes

Congenital toxoplasmosis in its complete form results in a child with hydrocephalus, hepatosplenomegaly, jaundice and chorioretinitis. Often the lungs and other organs are also invaded by the parasite and systemic involvement is diffuse. More commonly there appears to be a milder, incomplete form in which chorioretinitis and often strabismus, appearing at an early age, are the only clinical manifestations. In some cases of this type, flecklike diffuse cerebral calcifications may be found, providing evidence of the previous necrotizing multifocal encephalitis, and the patient may be epileptic.

In adults, most infection is asymptomatic.[10] When systemic symptoms appear, they most frequently mimic the syndrome of infectious mononucleosis. Lymphadenopathy may be prominent and may be prolonged. Hematological examination may reveal that the white blood cell count is either elevated or depressed, and it is not unusual to find a preponderance of atypical lymphocytes. A feeling of malaise and some adenopathy often persist for months. Uncommonly a maculopapular rash covers the body, but usually spares the scalp, palms of the hands and soles of the feet. The lesions may coalesce and appear purpuric.

In the rare, very severe adult cases, a pneumonitis, myocarditis and encephalitis may occur. Fatal cases of adult toxoplasmosis have been reported.

Of all infections by Toxoplasma in the adult, chorioretinitis appears to be the most common. Since the initial isolation of the parasite from the eye by Jacobs, Fair and Bickerton,[9] a number of cases of ocular infection have been reported,

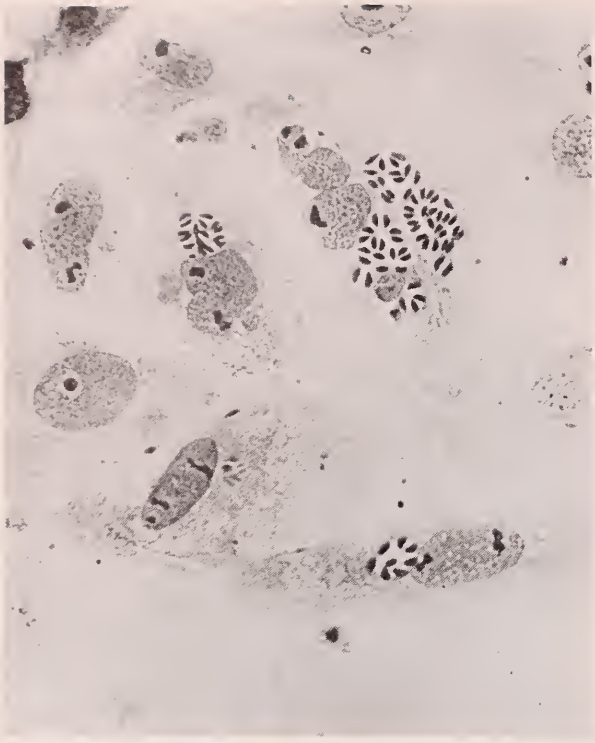


Fig. 1.—Proliferative form of Toxoplasma in primary human amnion tissue culture.

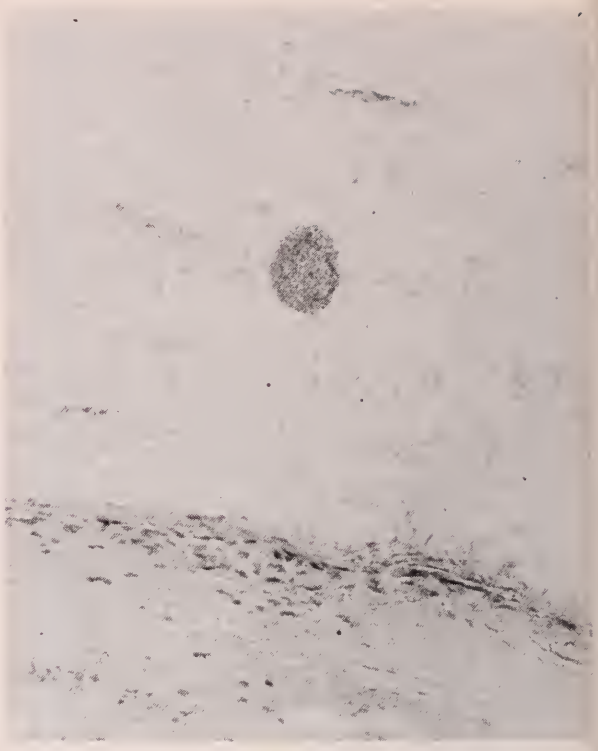


Fig. 2.—Toxoplasma cyst in guinea pig retina.

the diagnosis having been proved by isolation or histologic demonstration of the organism. Statistical surveys of large numbers of uveitis patients and comparable controls indicate that between 25 and 80 per cent of all posterior chorioretinitis is caused by this parasite. Characteristically, the organism invades the retina causing involvement of all layers of this structure and usually clouding the vitreous with inflammatory debris. When the infection subsides, the necrotic retina melts away leaving a crater through the retina and usually the choroid. The lesion appears as a hole with a bone white base and with black pigment around the margins (fig. 4).

Isolation of the Parasite

The most direct method for the diagnosis of toxoplasmosis is the isolation of the parasite. Although toxoplasmas infect most known tissues, they have been isolated most often from infected lymph nodes by injection of a suspension into mice. Since many strains of Toxoplasma are relatively avirulent for mice and do not kill them, it is necessary to perform serological tests on the surviving animals and to subinoculate those with positive titers into fresh mice, repeating this process for several months until organisms are seen.

The parasites have also been isolated from the blood during early stages of acute infection. Recently Remington, Kaufman, Melton and Jacobs[11] have even isolated the organism from the blood of a patient four months after the dye test and skin test were known to be positive. It is assumed that the organisms were present within leukocytes and thereby protected from antibody. This experience suggests that it may be possible to recover the organism from the blood of patients with chronic disease sufficiently frequently to make blood cultures more useful than now realized.

Serological Tests

The other method for diagnosing toxoplasmosis is the measurement of circulating antibody levels. Of the techniques presently available, the methylene blue dye test of Sabin and Feldman[12] is the most useful. It is based on the finding that when toxoplasmas, which normally stain blue after exposure to methylene blue, are killed by antibody combined with complement and properdin (accessory factor), the staining disappears. A serum dilution in which 50 per cent of organisms are unstained is the titer. Dye test antibodies appear about two weeks after infection although four weeks may be required for the dye test to become positive. After acute infection, titers usually rise gradually and remain stable for several months. Later, they may decrease slowly over a period of many years, remaining at a low level, perhaps for life.

Epidemiologic antibody surveys by Feldman and others[13,14] indicate the frequency of positive antibody titers in populations at large. In many areas of the United States of America about one third of adults show evidence of previous infection, while in some areas, such as Tahiti, more than 90 per cent of adults have antibodies. Although areas vary considerably, the prevalence of antibodies is higher in warm, moist climates than in cool, dry climates.

Although the dye test is very useful, it is difficult and dangerous to perform. It requires the use of potentially dangerous live organisms which must be passed in mice every three days. These organisms, after staining, must be microscopically examined and laboriously counted to determine the ratio of stained to unstained organisms in each serum dilution. There is little question, despite earlier controversy, that this is a specific toxoplasmacidal neutralizing antibody and that in inactivated serum the presence of antibody means previous exposure to Toxoplasma.

A safer and more simple serological test is the complement-fixation test. Complement-fixing antibodies appear later and disappear earlier than dye test antibodies. Since, however, the complement-fixing antigen has not been well standardized, the results are difficult to quantitate. Because this test is less sensitive than the dye test, it is not suitable for general use, but it has been used in conjunction with the dye test as a measure of acute infection. Since the complement-fixing test may become negative within a few years after infection, it is of little value in the diagnosis of ocular inflammation which occurs during the chronic stage of infection.

Several agglutination tests have been developed to measure Toxoplasma antibodies. These tests which appear to be of great value utilize agglutination of whole organisms or erythrocytes to which antigen has been bound.

The agglutination of fixed whole organisms described by Fulton and Turk[15] requires large quantities of purified organisms from peritoneal exudate of cotton rats. Although the preparation of the organisms may be laborious, sufficient studies have not been performed to evaluate its results.

The hemagglutination test described by Jacobs and Lunde[16] has many advantages in that it is quantitative, employs a dead antigen, and is easier to perform than the dye test. Hemagglutination antibodies appear shortly after dye test

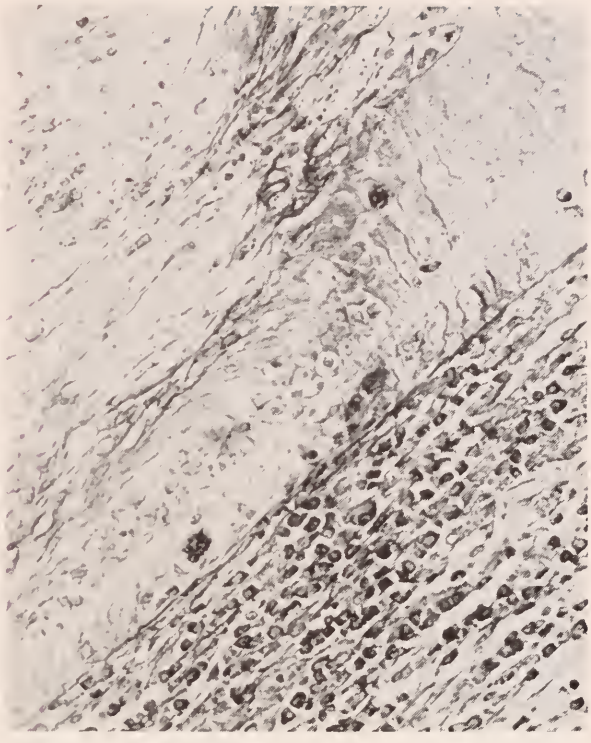


Fig. 3.—Toxoplasma cysts in guinea pig brain.



Fig. 4.—Toxoplasma chorioretinitis.

antibodies in cases of acute infection and shortly thereafter rise to a similar level. In testing several hundred sera, the hemagglutination titers and dye test titers were found generally to agree within one fourfold dilution.[17]

Although the hemagglutination antigen is prepared from large amounts of peritoneal exudate, it is stable for long periods of time when stored frozen or lyophilized.[18] This test is exceedingly simple to perform in that it is only necessary to look at the bottom of test tubes to determine the titers (fig. 5). This test has the difficulty that the tanned and sensitized erythrocytes cannot

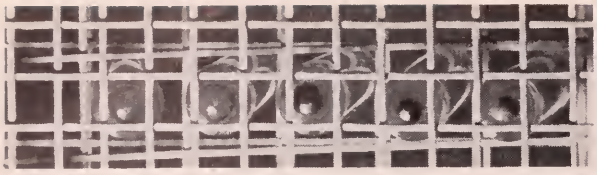


Fig. 5.—Hemagglutination test with formaldehyde-treated erythrocytes. Concentrated antibody-containing sera produce larger diffuse patterns of cells as seen on the left. As the antibodies are diluted out, the cells settle in small buttons. In this case the change in pattern occurs after the second tube, and the dilution of the serum in this tube is taken as the titer.

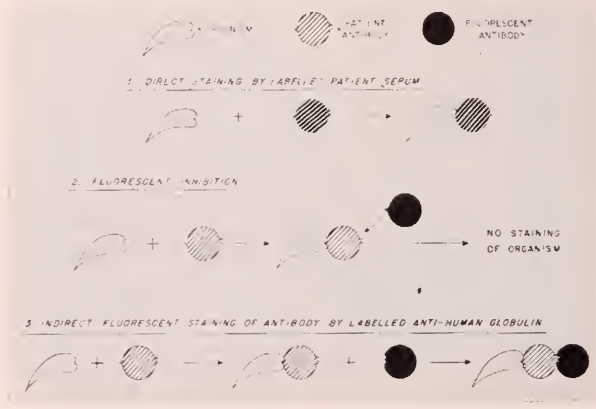


Fig. 6.—Antibody detection by fluorescein labelling:
(1) Although patient globulin can be conjugated with fluorescein and specific staining thereby detected, this is too laborious to be practical.
(2) Fluorescence inhibition is not sufficiently sensitive for many applications, but the inhibition of staining of previously prepared antibody conjugate by antibody in the test serum is useful in the detection of antibodies in such test serum.
(3) It is possible to expose organisms to unknown serum and, if serum antibodies are present, to demonstrate them by staining with fluorescein-labelled anti-human globulin. This technique has not received wide application.

be stored for longer than about two weeks. Since the tanning and sensitization of cells is time-consuming, its use has been limited to a few research or testing laboratories where many sera are to be tested at one time.

Modifications of the hemagglutination test employing formaldehyde-treated erythrocytes have been described.[17,19] These erythrocytes can be stored after tanning or sensitization, by refrigeration, freezing or lyophilization. The hemagglutination test using fresh erythrocytes requires either sheep or type O Rh negative cells. My associates and I have found, however, that any type of human cells can be used for formaldehyde treatment, making them much more convenient to obtain. This treatment of the erythrocytes permits the preparation of large quantities of cells for use at a later time as needed. Although difficulties remain in the preparation of this sensitized reagent, it is anticipated that this type of test may enjoy more general use.

Fluorescence inhibition tests have been used by Goldman[20] to detect Toxoplasma antibodies. The fluorescence inhibition test has recently been modified by the dilution of the fluorescein-labelled antibody to its staining end-point, which makes it possible for such studies to be reproducible and quantitative. This test is based on the principle that nonlabelled antibody inhibits the specific staining of fixed toxoplasmas by labelled antibody (fig. 6). After the initial assembling of the necessary microscopic equipment for fluorescence, the test is very easy to perform and, like the hemagglutination test, uses a dead antigen. Although each serum dilution must be examined microscopically, only a glance is necessary to determine the last dilution which produces inhibition (fig. 7). This dilution is taken as the titer.

In comparison of dye test titers and fluorescence inhibition titers on 178 sera, it was found that fluorescence titers were generally much lower (table 1). Sixty-seven per cent of sera with dye test titers of 16 were negative in the fluorescence inhibition test as were 48 per cent with dye titers of 64 and 29 per cent with titers of 256. Although only a few cases of acute systemic infection have been studied, the fluorescence inhibition test appears to become positive about the same time as the dye test, and before the hemagglutination test. It therefore may be useful in the detection of acute systemic infection.

Since the majority of parasitologically proved cases of ocular toxoplasmosis reported have low dye test titers, it seemed that the fluorescence inhibition test would not be sensitive enough for ophthalmological studies. In order to determine if this was so, seven cases of parasitologically proved ocular toxoplasmosis were tested for fluorescence inhibition antibodies and two of them were negative. The remaining sera were barely positive only when tested as undiluted serum (table 2). Fluorescence inhibition does not, therefore, appear to be acceptable in the study of ocular disease.[21]

The toxoplasmin skin test provokes a delayed hypersensitivity reaction best examined after 36 to 48 hours.[7] Despite its ease of performance, as long as a year may be required after infection for the skin test to become positive. In acute infection, therefore, the skin test would be expected to be negative. The finding of a negative skin test and a positive dye test in an acutely

ill patient is considered by many sufficient evidence to begin therapy. Conversely in ocular disease, which is a manifestation of chronic infection, a positive test supports the diagnosis of toxoplasmosis.

The correlation of skin test with dye test is a matter of conflicting reports. We, using antigen prepared and standardized by Dr. Leon Jacobs at the National Institutes of Health, find that in patients with uveitis, about 95 per cent with positive skin tests will also have positive dye tests, and there are virtually no false positives.[22] Fair, who also prepared his own antigen, finds similar results. Others such as Feldman who use a much more dilute antigen find the test less reliable. It seems that most commercially available antigens, though useful, are not as useful as the specially prepared antigens in testing for ocular disease, doing antibody surveys, or helping to rule out old infection in an acutely ill patient with a positive titer.[23]

Treatment

The best accepted therapy for toxoplasmosis consists of treatment by pyrimethamine (Daraprim) and sulfonamides. The sulfonamides are well known and will not be discussed in detail, but the excellent work of Eyles and Coleman[24] indicates that they potentiate the effect of pyrimethamine to an extent that they are an integral part of the therapy.

The sulfonamides are metabolic antagonists competitively inhibiting the utilization of para-aminobenzoic acid. Similarly, pyrimethamine prevents the reduction of folic acid to tetrahydrofolic acid. Both therefore act on the metabolic pathway of folic acid metabolism and inhibit the synthesis of nucleic acids (the methylation of purines) as well as the degradation of histidine.

Pyrimethamine was first developed as an antimalarial, but Eyles and Coleman[25] and, independently, Summers[26] discovered its efficacy against Toxoplasma, but higher concentrations of drug are required in the treatment of toxoplasmosis than in the antimalarial effect. Since the drug is slowly excreted and the metabolism of this drug is similar to that of digitalis, a loading dose about four times the maintenance dose is most effective in establishing a prompt and stable blood level (fig. 8).

In any discussion of pyrimethamine, toxicity must play a prominent part. In addition to nausea which is not uncommon, and occasional headaches, like the folic acid antagonists used in



Fig. 7.—Formaldehyde-fixed toxoplasmas stained with fluorescein-labelled antibody.

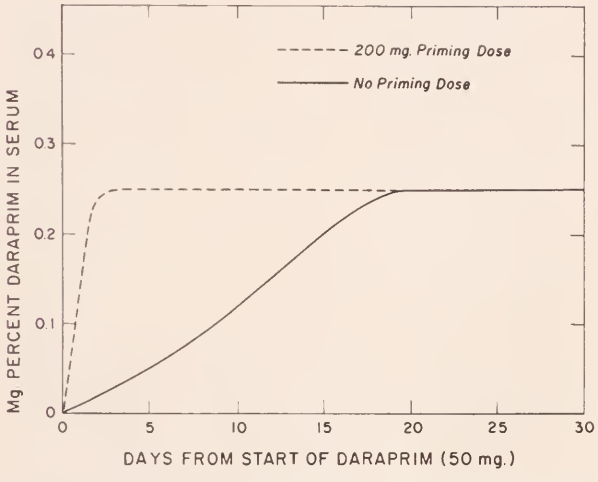


Fig. 8.—Pyrimethamine levels in serum of patients, showing the value of a priming dose in producing therapeutic levels rapidly.

Table 1.—Preliminary Comparison of Dye Test and Fluorescence Inhibition Titers on 178 Sera

Dye Test Titer	Fluorescence Inhibition Titer					
	Negative	Undiluted	4	16	64	256
Negative	94		1			
16	18	1	4	3	1	
64	14	2	8	5		
256	4		2	3	3	2
1024			2	1	7	5
4096						1

Table 2.—Comparison of Dye Test and Fluorescence Inhibition Titers of Five Cases of Parasitologically Proved Ocular Toxoplasmosis

Case	Date Sample Drawn	Dye Test Titer	Fluorescence Inhibition Titer
M.F. 1	9-3-57	16	negative
W.G. 1	11-23-60	256	positive*
V.I. 1	9-28-60	256	positive*
O.C. 2	2-25-59	1024	positive*
O.C. 2	9-14-59	1024	negative
O.W. 2	1-30-58	64	positive*
O.W. 2	3-31-59	1024	positive*

*Positive only when tested as undiluted serum.
1 Serum obtained from Dr. M. Hogan.
2 Serum obtained from Drs. R. Wood and L. Jacobs.

cancer chemotherapy, depression of marrow elements must be guarded against in therapy with pyrimethamine. All marrow elements may be depressed, and with therapy it is unusual for some depression of leukocytic elements not to occur. The most serious clinical manifestation of pyrimethamine toxicity, however, is thrombocytopenia which may lead to serious bleeding. If the platelet count declines to about 80,000 per cubic millimeter, therapy should probably be stopped. Infection has not been reported as a consequence of such toxicity, and the toxicity has always been spontaneously reversible upon cessation of the drug. It is said that folinic acid may speed the natural recovery of the marrow.[27]

The hematologic toxicity of pyrimethamine is dose-related, and a regimen which appears acceptable for systemic disease but yet carries with it minimal toxicity is 100 mg. of pyrimethamine as a loading dose and 25 mg. a day thereafter combined with 4 Gm. of triple sulfonamide a day. Therapy is usually continued for about five weeks. If marrow depression occurs, the resumption of the same dosage schedule after toxicity has disappeared often does not result in a return of hematologic abnormalities.

Since these drugs act primarily to block nucleic acid synthesis, they are effective only against multiplying organisms. Encysted organisms are not killed, and it is impossible to "sterilize" an infected patient. The purpose of therapy is to stop the proliferation of organisms. Active disease, therefore, may require therapy, but the finding of the stigmata of inactive disease is not an indication for therapy.

Although other antibiotics such as spiramycin have slight toxoplasmacidal activity, there is no evidence to suggest that they are therapeutically valuable in man. Drugs effective against the cyst form and less toxic than pyrimethamine are being sought, but though the present therapy is not ideal, our clinical experience attests to its success.

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Clinical Application of Renal Physiology

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The detection of abnormalities in renal function early in the course of renal disease, prior to the development of the uremic syndrome, has been the stimulus for much of the investigational work leading to the present understanding of renal physiology. Unfortunately, the procedures used in investigative laboratories for evaluation of the various aspects of renal function do not lend themselves readily to clinical practices. The purpose of this paper is to review some of the methods available to the clinician, which, although not as highly accurate as the procedures used for investigational work, give an adequate appraisal of renal function for clinical purposes. The procedures to be discussed have the decided advantage of simplicity and availability for clinicians. While the laboratory methods will be discussed briefly, the physiologic basis and interpretation will be stressed.

Concept of Clearance Calculation and Interpretation

Probably the concept which has done the most to provide an understanding of the physiology of the kidney has been that of clearance. The term "clearance" refers to the volume of plasma cleared of a given substance per minute. This concept is not physiologically accurate since most substances are not totally removed from the plasma in a single excursion through the kidney. As will be seen, however, the concept of clearance, plus the knowledge of how certain substances are handled by the kidney, offers great insight into renal physiology. Assume that one wishes to calculate the clearance of substance X (C_X) and that the concentration of substance X can be quantitatively determined in plasma and urine (fig. 1). If concentration of X in milligrams per hundred milliliters in the urine (U_X) is multiplied by the volume of urine flow in milliliters per minute (V), the results will equal the quantity of X excreted by the kidneys per minute. Knowing the concentration of X in milligrams per hundred milliliters in the plasma (P_X), one can then calculate the volume of plasma totally cleared of X per minute, necessary to supply an amount of X equal to U_X V, by dividing U_X V by P_X. The calculation would then be:

$$C_X = \frac{U_X \ V}{P_X}$$

Whereas C_X is the clearance of X, U_X is the urine concentration of X in milligrams per hundred milliliters, V is the volume of urine flow in milliliters per minute and P_X is the plasma concentration of X in milligrams per hundred milliliters. Substituting the units of U_X, V and P_X,

$$C_X = \frac{\text{mg./100 ml.} \times \text{ml./min.}}{\text{mg./100 ml.}} = \text{ml./min.}$$

The clearance of substance X is expressed in milliliters per minute. Empirically, for standardization and comparison of clearances between varying sizes of subjects and species, all clearances are corrected to a body surface area of 1.73 square meters. Thus, the clearances of mice may be compared to those of whales, if one wishes to make the comparison. The clearance value of a given substance can have physiological meaning only if the method of excretion of the substance by the kidney is known, that is, glomerular filtration, tubular reabsorption, and/or tubular excretion. The clearance of a substance which is physiologically inert, filtered by the glomerulus and neither reabsorbed nor excreted by the tubules, will be equivalent to the glomerular filtration rate. The glomerular filtration rate is used as a standard of reference in interpreting clearances of other substances. Clearances of a given substance which exceed the glomerular filtration rate would imply tubular excretion, or glomerular filtration plus tubular excretion. Clearances of a substance which are less than the glomerular filtration rate would imply glomerular filtration plus tubular reabsorption.

Measurement of Glomerular Filtration Rate

One of the primary physiological functions of the kidney is filtration of the plasma component of blood, that is, glomerular filtration. It is gen-

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$$C_x = \frac{U_x \; V}{P_x}$$

$$C_x = \frac{\text{mg./100 ml.} \times \text{ml./min.}}{\text{mg./100 ml.}} = \text{ml./min.}$$

C_x = clearance of X.
U_x = urine concentration of X.
V = urine flow in ml./min.
P_x = plasma concentration of X.

Fig. 1.—Calculation of clearances.

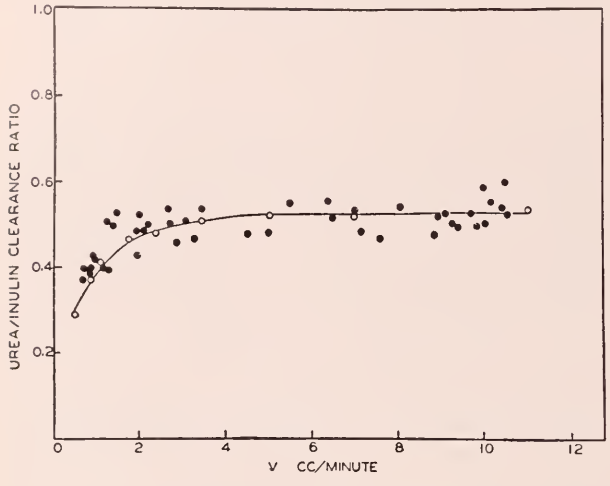


Fig. 2.—The relationship of urea clearance to urine flow. Note that urea clearance becomes almost constant at urine flows at or above 2 ml./min. (From Smith, H. W.: The Kidney, Oxford University Press, 1951.)

erally appreciated clinically that when glomerular filtration falls below critical levels, blood concentrations of substances such as urea, creatinine, uric acid and/or phosphorus, become elevated. Glomerular filtration may, however, approach 50 to 20 per cent of normal before the earliest change in blood concentration of these substances can be detected. Obviously, there is a clinical need for more critical methods of evaluating glomerular filtration, if one is to detect less than severe alterations in this aspect of renal function. The inulin clearance is accepted as the most accurate measurement of glomerular filtration rate.[1] The endogenous creatinine clearance, which may be considered less accurate than the inulin clearance for exacting investigative work, is an adequate measurement of glomerular filtration rate in clinical practice.[2,3] It has the decided advantages of simplicity and not requiring a constant infusion apparatus. The normal glomerular filtration rate as measured by the inulin clearance averages 124 ± 25.8 ml./min. in males and 109 ± 13.5 ml./min. in females corrected to 1.73 square meters of body surface area.[1] The corresponding figures for the endogenous creatinine clearance are 123 ± 19.3 ml./min. in males and 114 ± 16.0 ml./min. in females per 1.73 square meters of body surface area.[2] These measurements mean that the normal kidneys filter 183 liters or 50 gal. per day. This volume amounts to 58 times the normal plasma volume, the equivalent of the plasma volume being filtered about every 25 minutes. The glomerular filtration rate remains relatively constant in a given subject under normal conditions. Fluctuations in urine flow rate are not associated with changes in glomerular filtration rate, but are rather controlled by changes in the tubular handling of water and solutes. There is, however, a relationship between glomerular filtration and the maximal rate of water excretion by the kidneys. It has been observed that during maximal water diuresis, maximal urine flow equals approximately one eighth of the glomerular filtration rate.[1] This will be commented on later.

Urea Clearance

One of the time-honored tests of renal function, related in part to glomerular filtration rate, is the urea clearance. Urea is handled by the kidney by glomerular filtration and tubular reabsorption by passive defusion. The percentage of filtered urea reabsorbed varies from 70 per cent at low urine flows to 40 per cent at urine flows above 2 ml./min. in man. Conversely, the urea clearance increases from 30 per cent of the glomerular filtration rate at low urine flows to 60 per cent of the glomerular filtration rate at urine flows above 2 ml./min. (fig. 2) or in actual figures 38 and 75 ml./min. respectively.[1] In practice, urea clearances should be carried out preferably with urine flows of 2 ml./min. or more.

Tubular Function

Clinically, tubular excretory function may be evaluated by the excretion of phenol red (phenolsulfonphthalein or PSP). Before elaborating on this procedure, some aspects of tubular function may be reviewed. Tubular function may be divided into two major aspects, namely reabsorption and excretion. A rough estimate of the magnitude of tubular function may be gained by examining the fate of some of the substances contained in the 183 liters of glomerular filtrate formed in 24 hours. Of this 183 liters, the tubules must reabsorb some 181.5 liters (49.5 gal.) of water, 1,100 Gm. of sodium chloride, 410 Gm. of

sodium bicarbonate, 182 Gm. of glucose and considerable quantities of phosphate, calcium, magnesium and other substances. In this operation, they excrete 1 to 2 liters of water containing 30 Gm. of urea, a variety of metabolic products and foreign substances as well as any excess of the substances mentioned which are unnecessary for maintaining the body's internal environment.

Tubular Reabsorption
Concept of Tubular Maximum

Tubular reabsorption may be active as with sodium or glucose, or passive as with chloride or urea. Since active tubular reabsorption is mediated through specific enzyme systems, there is a maximal rate at which the tubules may reabsorb many substances such as glucose. When the load of glucose being filtered by the glomeruli exceeds the maximum capacity of the tubules to reabsorb glucose, glucose begins to appear in the urine. This load of glucose is termed the tubular maximum for glucose, or glucose T_m and is expressed as a rate in milligrams per minute.

Tubular Excretion

There is similarly a maximum rate of tubular excretion of many substances. As the plasma load of a substance is gradually increased, the urinary excretion increases until the plasma load exceeds the tubular maximum. Thereafter, the urinary excretion remains constant in spite of further increases in plasma concentrations. When the plasma concentration of such a substance is below the tubular maximum, the urinary excretion will reflect the load presented to the kidneys, that is, renal plasma flow. If such a substance is completely cleared from the plasma in a single excursion through the kidney, its clearance will be equal to the renal plasma flow. In the laboratory, several dyes have been extensively used to evaluate this aspect of tubular function. While phenolsulfonphthalein is such a dye, its use has given way to the more widely used para-aminohippuric acid (PAH) in investigational work. The measured maximum rate of tubular excretion for phenolsulfonphthalein in man averages 36 mg./min. Approximately 6 per cent of phenolsulfonphthalein is filtered by the glomeruli, the remaining 94 per cent being excreted by the tubules.

Methods

Endogenous Creatinine Clearance.—The endogenous creatinine clearance may be carried out with clearance periods ranging from 1 to 24 hours. In our laboratory, the shorter period is preferred. The clearance is performed in the morning during a fasting state. An adequate water diuresis (in excess of 2 ml./min.) is instituted prior to and during the clearance, to insure adequate urine volumes during the shorter periods and to minimize errors due to incomplete voiding. In most instances, catheterization is not employed. Rather, the importance of complete bladder emptying is stressed to the subject, and the clearance is carried out in duplicate or triplicate. Blood specimens are drawn at the approximate midpoint of each clearance period. Plasma and urine creatinine determinations are performed in the method described by Brod and Siroto.[1] The clearances are calculated in the standard fashion and corrected to a body surface area of 1.73 square meters, using a standard Du Bois nomogram.

Urea Clearance.—The urea clearance may be carried out simultaneously with the endogenous creatinine clearance. Urea determinations of plasma and urine are performed by the method described by Van Slyke[4] and the clearance calculated in the standard manner.

Phenolsulfonphthalein. — Following the institution of a water diuresis, 6 mg. of phenolsulfonphthalein is injected intravenously. The dye is injected at a time when the patient has a partially filled bladder to insure an adequate 15 minute specimen. The urine specimens are collected by complete bladder emptying at 15, 30 and 60 minutes after the injection. The urine concentration of phenolsulfonphthalein is determined by the Rowntree and Geraghty method[5] and expressed as per cent of the injected dose.

Relationship of Urea Clearance, Glomerular Filtration Rate, and Water Diuresis

Obviously, measurements of the endogenous creatinine clearance will give a more accurate evaluation of the status of glomerular filtration than simple measurement of blood urea, blood urea nitrogen, nonprotein nitrogen, creatinine, uric acid and/or phosphorus, but there is more clinical information which may be extrapolated from them. In clinical practice, one makes use of the fact that urea clearance is maximal with urine flows of 2 ml./min. (2,880 ml./day) in treating patients with uremia. Although urea is not thought to be the toxic agent in the uremic syndrome, clinical improvement follows the fall in blood urea level on a water diuresis, suggesting that the excretion of the substance or sub-

Table 1.—Relation of Maximum Water Diuresis to Glomerular Filtration Rate

Glomerular Filtration Rate	Maximum Water Diuresis
Ml./Min.	Ml./24 Hrs.
150	27,000
125	22,500
100	18,000
50	9,000
25	4,500
16	2,880
10	1,800
5	900

The relationship of maximum water diuresis to glomerular filtration rate based on the observation that the maximum rate of water diuresis equals one eighth of the glomerular filtration rate.

stances responsible for the syndrome of uremia, like that of urea, is enhanced by urine flows of 2 ml./min. or more. As mentioned previously, maximum urine output under a maximum water diuresis will not exceed approximately one eighth of the glomerular filtration rate (table 1). This ratio means that patients with glomerular filtration rates of less than 16 ml./min. will have a maximum rate of urine flow of less than 2 ml./min., and attempts to establish a diuresis of this magnitude with water alone will result in water retention and ultimately water intoxication. One may also reason from the foregoing that the mere ability to excrete 3,000 ml. of urine per day does not represent "good renal function," for this may represent a glomerular filtration rate of only 16.5 ml./min., an 87 per cent reduction in glomerular filtration rate from normal.

Relationship of Maximum Dietary Protein Intake to Glomerular Filtration Rate

Assume for a moment that the average nitrogen content of protein is 16 per cent and, for purposes of discussion, that all protein is metabolized to urea. Knowing that nitrogen makes up 47 per cent of urea, one may calculate the amount of urea formed by metabolizing X grams of protein. Conversely, given the total 24 hour urinary excretion of urea, the fact that urea makes up 90 per cent of urinary nitrogen and assuming a constant blood urea concentration, one may calculate the amount of protein metabolized per 24 hours. Clinically, one is often faced with the problem of determining the quantity of protein a given subject with reduced renal function may eat in a 24 hour period without causing a rise in blood urea concentration. In table 2 an attempt has been made to correlate roughly the maximum allowable protein intake related to varying levels of glomerular filtration rate, and under the conditions of small and large (2 ml./min.) urine flows. It must be emphasized that there are inaccuracies in this latter reasoning and that the figures in the chart are not meant to be absolute. The fact remains, however, that the conclusions to be drawn hold true clinically.

Arbitrarily, a blood urea level of 40 mg./100 ml., or the upper limits of normal, is assumed throughout the chart. The assumption that the urea/creatinine clearance ratios remain constant at all levels of filtration is not entirely accurate. The one point to be drawn from this chart is that under conditions of maximal urine flows, the kidney can excrete an amount of urea equivalent to the weight of protein in grams numerically equal to glomerular filtration rate. Under conditions of low urine flow, the amount of protein in grams numerically approaches one half the glomerular filtration rate. Thus, a 70 Kg. man with a body surface area of 1.73 square meters and a glomerular filtration rate of 125 ml./min. would be able to metabolize roughly 126 Gm. of protein per 24 hours during a water diuresis of 2 ml./min. without elevating the blood urea concentration above the upper limits of normal. As may be seen from this chart, the blood urea concentration may begin to rise on a normal protein intake of

Table 2. — Relationship of Glomerular Filtration Rate, Urea Clearance and Approximate Maximum Allowable Dietary Protein

Glomerular Filtration Rate	Urea Clearance		Urea Excretion		Protein Equivalent	
Ml./Min.	Ml./Min.		Gm./24 Hrs.		Gm./24 Hrs.	
	Max.	Min.	Max.	Min.	Max.	Min.
150	90	45	52	26	153	76
125	75	38	43	22	126	63
100	60	30	34	17	100	50
75	45	22	26	13	76	38
50	30	15	17	9	50	25
20	12	6	7	3.5	21	10

Note that the maximum protein intake in grams numerically approximates the glomerular filtration rate under conditions of urine flows of 2 ml./min. and assuming a blood urea concentration of 40 mg./100 ml.

Table 3.—Slopes of Phenolsulfonphthalein Curves

Minutes	Per Cent Excretion		
	Falling (Below T_m)	Flat (Above T_m)	Rising (Residual Urine)
15	30	20	10
30	20	20	20
60	10	20	30

Varying slopes of phenolsulfonphthalein curves with identical total excretions but differing interpretations. The figures in the left hand column represent a characteristic normal curve in which the tubular load is below T_m. The figures in the center column represent the typical flat curve in which the tubular load is above T_m as is seen with marked reduction in tubular function. The figures in the right hand column represent the rising curve characteristic of residual urine, improper injection or improper urine collection.

70 Gm. per day at glomerular filtration rates of less than 75 ml./min. and most likely would be elevated at a glomerular filtration rate of less than 50 ml./min. At a glomerular filtration rate of below 20 ml./min., the blood urea concentration may be elevated in spite of severe protein restriction. Again, it must be emphasized that these figures are approximations.

Relationship of Phenolsulfonphthalein Excretion to Tubular Function

As previously mentioned, the maximum rate of tubular excretion of phenolsulfonphthalein is normally 36 mg./min. Thus with the dose of phenolsulfonphthalein used in the test (6 mg.), normal kidneys will be working well below tubular maximum (table 3). The amount of phenolsulfonphthalein excreted, therefore, will be proportional to the plasma concentration and will be maximal immediately after the injection of the dye. Thereafter, the rate of excretion will fall as the plasma concentration falls. The shape of the curve will show a peak at 15 minutes (more than 25 per cent) with the fall-off at 30 and 60 minutes. When tubular function has been reduced to a level at which the tubules are excreting phenolsulfonphthalein at a maximum rate, the urinary excretion becomes constant and the curve flattens out. Thus a flat curve represents marked reduction of tubular function in spite of the total excretion in one or two hours. With further reduction in tubular excretory capacity, the curve remains flat and the total excretion is further reduced. It follows then that the normal phenolsulfonphthalein curve cannot have a rising slope. The presence of a rising slope indicates improper injection of the dye, incomplete bladder emptying or a residual urine.

Summary

Reduction in renal function prior to the development of the uremic syndrome may be detected with simple laboratory procedures available to most clinicians. Additional clinical information which may be deduced from these measurements is presented.

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Clinicopathological Conference

University of Florida College of Medicine

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First Admission (February 27 to March 13, 1959): A 29 year old Negro woman was admitted to the University of Florida Hospital on Feb. 27, 1959 with the chief complaint of swelling of the abdomen and feet of two weeks' duration.

Present Illness: The patient was told of high blood pressure during her first pregnancy at the age of 17 and was again told of it during each of four subsequent pregnancies. Blood pressure levels were not known, and she was not seen by a physician during the intervals between her pregnancies. She denied any symptomatology during these pregnancies and indicated that the deliveries were uncomplicated. Birth weights are not known.

Following her last delivery in 1955, the patient was told that "bad kidneys" were causing her high blood pressure, and a tubal ligation was recommended and carried out at Jackson Memorial Hospital in Miami. A "low PSP" and a nonprotein nitrogen of 65 mg. per hundred milliliters were recorded at this time. She was discharged and subsequently felt well except for mild generalized weakness and some shortness of breath on exertion. She was treated by a local Miami physician with unknown medications and apparently did fairly well until July 1958 when she was admitted to Jackson Memorial Hospital with acute pulmonary edema. Findings at this time included a blood pressure of 220/120 mm. Hg, proteinuria and pyuria, blood urea nitrogen 82 mg. per hundred milliliters, and a total phenolsulfonphthalein excretion of less than 1 per cent in two hours. Urine culture grew a mixture of organisms. The pulmonary edema cleared with appropriate medication, and the pyuria improved while she was receiving Furadantin. She was discharged on a program of salt restriction, digitalis, chlorothiazide and Serpasil and was followed in the outpatient clinic. The hypertension remained essentially unchanged as did the blood urea nitrogen.

In early January 1959 she was treated for an episode of fever, right-sided costovertebral angle pain and pyuria with a 10 day course of tetracycline with good response. Approximately one month prior to the first admission here, the patient moved to Dunnellon. Two weeks prior to admission, she noted the onset of vomiting following meals, progressive weakness, shortness of breath and swelling of the feet and ankles. Hiccoughs occurred for several days prior to admission and epistaxis occurred on the day of admission. She denied dysuria, urgency, frequency and hematuria, but stated that nocturia two times had been present for many years. There was no history of urinary tract symtomatology during childhood.

Past History: The patient experienced the usual childhood diseases without sequelae. She denied significant illness other than that described.

Family History: The mother, aged 55, was living and well. The father was killed in an accident at age 30. The maternal grandfather was living at age 80 with hypertension.

Socioeconomic Status: The patient worked as a short order cook until July 1958, at which time she stopped work because of her present illness.

Review of Symptoms: A 5.5 Kg. (12 pound) loss in weight had occurred during the year prior to admission. Two pillow orthopnea and increased shortness of breath on exertion had been present since July 1958. Gastrointestinal symptoms were unremarkable except for recent nausea and vomiting. Amenorrhea had been present since December 1958. Occasional dizziness and unsteadiness of gait had been experienced, but no headache.

Physical Examination: The temperature was 37 C. (98.7 F.), pulse rate 106 and regular, respirations 24 and blood pressure 210/120 mm. Hg in the right and left arms and 250/140 mm. Hg in the right leg. The patient's general appearance was that of a chronically ill, young Negro woman who was alert and cooperative and in no acute distress. The skin was normal. The vision was grossly normal; the conjunctivae were pale, the pupils were round, regular and equal and reacted to light and accommodation; and the fundi showed marked arteriolar narrowing and tortuosity, arteriovenous nicking and a single flame-shaped hemorrhage in the left fundus. There were no exudates or papilledema. The ears and nose were normal. The teeth were in fair repair, and the mucous membranes of the mouth were pale. The pharynx was clear. The neck was supple, and there was moderate venous distention at 45 degrees. No adenopathy was noted, and the thyroid was not palpable. The breasts were normal. Except for a few scattered expiratory and inspiratory wheezes, the lungs were unremarkable.

On examination of the heart, the sinus rhythm was normal, a diffuse and forceful apical impulse extended 3 cm. beyond the midclavicular line in the fifth intercostal space, a grade II apical systolic murmur without radiation was present, and presystolic and protodiastolic gallops at the apex were described. The pulmonary valve second sound equaled the aortic valve second sound in volume. A healed midline suprapubic abdominal scar was present, and fluid wave and shifting dullness were described. The liver was down 4 fingerbreadths below the right costal margin in the midclavicular line and moderately tender. No other organs or masses were described. Peristalsis was normal, and moderate bilateral costovertebral angle tenderness was present. The external genitalia were normal, and there was a marital introitus with mild urethrocele and rectocele. Minimal white vaginal discharge was present. The cervix was unremarkable, and the uterus was normal in size and anterior in position. The adnexa were unremarkable as were the rectal findings. The extremities showed 4 plus edema of the feet and ankles and 2 plus pretibial edema. Neurologically, the Chvostek sign was positive, generalized motor weakness was mild, the deep tendon reflexes were active and equal, and coarse tremor of the outstretched hands was present.

Accessory Clinical Findings: On urinalysis, the hydrogen ion concentration was 5.5, specific gravity 1.005, protein 3 plus, sugar negative, and acetone negative. Microscopically, many white blood cells, occasional red blood cells, and an occasional white blood cell cast were noted. The stool was guaiac negative. The hematocrit reading was 18 per cent, and white blood cells numbered 5,300 with 59 per cent polymorphonuclear leukocytes, 1 per cent eosinophils, 1 per cent basophils, 38 per cent lymphoctyes and 1 per cent monocytes. Platelets were adequate on smear. Reaction was negative to the sickle cell preparation, to the VDRL test, and to the first and second strength purified protein derivative test. The blood urea nitrogen was 164 mg. and the fasting blood sugar 93 mg. per hundred milliliters, sodium 138 mEq., potassium 5.6 mEq., chlorine 113 mEq. and carbon dioxide combining power 12 mEq. per liter, and calcium 7.3 mg., phosphorus 8.2 mg., and total serum protein 5.6 Gm. per hundred milliliters with 1:1 albumen-globulin ratio. The serum cholesterol was 186 mg. and uric acid 9.0 mg. per hundred milliliters. Urine culture grew Esch. coli, Aerobacter and enterococcus, all sensitive to Furadantin, tetracycline and Chloromycetin. The urine protein was 2.8 Gm. and phenolsulfonphthalein less than 1 per cent in 24 hours. The maximum specific gravity of urine recorded was 1.010.

X-Rays: Chest x-rays demonstrated cardiomegaly with pulmonary congestion and multiple small pulmonary densities 1 to 3 mm. in diameter, thought to represent residua of previous episodes of pulmonary edema. On x-ray examination of the abdomen, renal outlines were obscured by overlying gas and colonic debris. An electrocardiogram showed slight ST elevation in VI to V3 indicative of early repolarization. The impression was that the electrocardiogram was normal.

The patient was placed on a Kempner Rice Diet and was maintained on digitalis. She was given 2 units of packed red blood cells with a rise in hematocrit level to 26 per cent. The urinary tract infection was treated first with Furadantin and then with Chloromycetin with some decrease in the pyuria. The blood pressure remained in the

range of 200/120 mm. Hg, and there was no significant change in the blood urea nitrogen or electrolytes. No further vomiting occurred, and the nausea improved on Compazine. A 7 Kg. .(15.2 pounds) loss in weight was associated with clearing of the edema. The patient was discharged after 14 days to continue at home on this regimen.

Second Admission (March 18, 1959 — Expired March 24, 1959): The patient was readmitted because of the occurrence of considerable bleeding from the mouth followed by recurrence of nausea and vomiting. Physical findings on this admission were essentially unchanged except for the presence of a 1 cm. bleeding ulceration on the left side of the tongue. Admission laboratory studies now revealed a hematocrit level of 24 per cent and a normal white blood cell count and differential count with platelets described as "adequate on smear." Urinalysis again revealed 3 plus protein, a low specific gravity and 5 to 15 white blood cells per high power field on microscopic examination. The stool was 1 plus guaiac. The blood urea nitrogen was 170 mg. per hundred milliliters, sodium 133 mEq., potassium 5.5 mEq., chlorine 102 mEq. and carbon dioxide combining power 14 mEq. per liter, calcium 7.7 mg. and phosphorus 9.8 mg. per hundred milliliters, and Lee White clotting time nine minutes. Prothrombin time was 17 seconds with a control of 15 seconds. The white blood cell count on March 23 was 19,500 with 80 per cent polymorphonuclear leukocytes, 8 per cent band forms and 12 per cent lymphocytes.

Course in Hospital: The bleeding from the tongue stopped with application of Gelfoam packs, and the patient received 1 unit of packed cells. On the morning of March 22, she became febrile up to 39 C. (102.2 F.) and that evening had two generalized tonic-clonic seizures and became comatose. Subsequently she remained semicomatose, responding only to painful stimuli, and occasionally she would respond to questions and commands with groaning. A lumbar puncture revealed an open pressure of 210 mm. No closing pressure was recorded. The tap was described as being traumatic with 800 red blood cells in tube 1, 600 in tube 2, and 420 in tube 3. The supernatant, however, was xanthochromic with a protein content of 168 mg. per hundred milliliters. Glucose was 72 mg. per hundred milliliters. A repeat neurological examination was not recorded. The patient remained febrile; her intake and output diminished, and she expired shortly following a third generalized convulsion on March 24.

Dr. George T. Harrell (Dean of the College and Professor of Medicine):

This then is the story of a 29 year old Negro woman with a chronic, steadily progressive illness of 12 years' duration and a terminal acute episode of three days' duration. The maternal grandfather is known to have had hypertension though he is living at age 80. A tendency toward essential hypertension does run in families. In the past history, she is said to have had no illnesses except the usual childhood acute infections without sequelae. No urinary symptoms are described, and no blood pressure readings are noted.

The first symptoms of the present illness are recorded at age 17 during her first pregnancy, at which time she had high blood pressure, but is otherwise said to have been asymptomatic. We do not know what intervened until age 25, during her fourth pregnancy in 1955, at which time the high blood pressure was again noted. At this time, she was having nocturia of two times nightly. A tubal ligation was done to prevent further pregnancies. At age 28, in July 1958, while working as a short order cook which required her to be on her feet, she noted weakness, dyspnea and orthopnea. When hospitalized in Miami, she had acute pulmonary edema indicative of myocardial failure. By January 1959, she had right costovertebral angle pain with fever, symptoms which suggest an acute pyelitis. With this episode, she lost 12 pounds (5.5 Kg.) in weight; so it must have been moderately severe. By February, she noted swelling of her feet, dyspnea, weakness, nausea, vomiting, hiccough, epistaxis, dizziness and unsteadiness, though no headache is described. By March, bleeding of the mouth had developed. On March 22, a temperature of 39 C. (102.2 F.) generalized convulsions and semicoma developed, and she died following a convulsion on March 24.

The physical signs do not record the exact blood pressure at age 17, but by age 28, July 1959, it was known to be 220/120 mm. Hg and on admission was found to be 210/120 mm. Hg in the right and left arms and 250/140 mm. Hg in the right leg. This blood pressure rules out a congenital anomaly such as coarctation of the aorta. She appeared chronically ill, pale with arteriolar narrowing in the optic fundi, and a flame hemorrhage, but no papilledema. The neck veins were distended. Inspiratory and expiratory wheezes were heard over the lungs indicating some constriction of the bronchioles, a common finding in myocardial incompetence as well as allergic asthma. The heart was enlarged with an apical sys-

tolic murmur and a gallop rhythm. These findings, combined with fluid in the abdomen, the liver edge palpable 4 fingerbreaths below the costal margin, and edema of the feet, ankles and pretibal area, are indicative of congestive failure. The bilateral costovertebral angle tenderness is an important observation and suggests active inflammation of the kidneys. The positive Chvostek sign is clinical evidence of a low blood calcium. The ulcer on the tongue is an interesting finding, and its appearance apparently precedes the history of convulsions so that it could not be the result of involuntary chewing during a convulsion. It is of interest that no positive neurologic localizing signs are recorded.

In the accessory clinical findings, we know that in 1955 the nonprotein nitrogen was 65 mg. per hundred milliliters and the phenolsulfonphthalein excretion low. These findings indicate severe renal damage at that time. By 1958, the blood urea nitrogen was 82 mg. per hundred milliliters, and phenolsulfonphthalein less than 1 per cent in two hours. These findings, coupled with protein and pus in the urine and a positive urinary culture, are all indicative of severe infection of the kidneys. By 1959, the increase in blood urea nitrogen to 164 mg. and the urine protein to 3 plus, with the maximum specific gravity of the urine 1.010, is further confirmation of severe renal damage. The presence of white blood cell casts is indicative of actual infection in the kidney parenchyma. The organisms involved were cultured at this time and found to be Esch. coli, Aerobacter aerogenes and enterococcus. The sodium of 138 mEq., potassium 5.5 mEq., and chloride 102 mEq. per liter are not greatly altered. The carbon dioxide combining power of 12 mEq. per liter is indicative of acidosis, which is a common finding in chronic renal failure as is the uric acid of 9 mg. per hundred milliliter. The calcium of 7.3 mg. per hundred milliliters confirms the suspicion from the Chvostek test. The low calcium coupled with the elevated phosphorus of 9.8 mg. per hundred milliliters reflects the inability of the kidneys to compensate for the renal acidosis.

The observations on the blood platelets, the prothrombin time of 17 seconds with a control of 15 seconds, and clotting time of nine minutes indicate some impairment of coagulation mechanisms and explain the bleeding tendency. The initial white blood cell count of 5,300 with 59 per cent polymorphonuclear leukocytes is not indicative of a generalized infection. The subsequent increase to 19,500 with 88 per cent polymorphonuclear leukocytes indicates a spread or exacerbation of the infection. The rise in the hematocrit level from 18 to 24 mm. would be explained by the transfusion of packed red blood cells. The opening spinal fluid pressure of 210 mm. of water indicates some edema of the brain even though no papilledema was observed on physical examination. The presence of red blood cells can be explained by trauma, but the spinal fluid should not have been xanthochromic from this tap. Xanthochromia may result from old hemorrhage or from the presence of increased protein, which is confirmed by a level of 168 mg. per hundred milliliters. The spinal fluid glucose of 72 mg. per hundred milliliters in the absence of polymorphonuclear leukocytes would not suggest a bacterial infection of the meninges. The x-rays of the chest, showing pulmonary nodular infiltration, might be a result of pulmonary edema or of a generalized spread of the infection.

From these data, it is quite clear that the patient has had a chronic pyelonephritis involving both kidneys due to a mixed bacterial flora. From the elevation of blood pressure at age 17 with the first pregnancy, one would suspect that this woman had had her initial infection in childhood in spite of the absence of recorded urinary symptoms. The absence of edema makes toxemia of pregnancy unlikely. If this episode were an exacerbation of pre-existing glomerulonephritis, one would expect a history of an acute episode in childhood following a sore throat or some other infection. Pregnancy with its tendency to relax connective tissue results in dilatation of the ureters and sets the stage for bacterial invasion of the upper segment of the urinary tract. Repeated episodes of urinary infection with subsequent pregnancies are a common occurrence and emphasize the need to recognize the condition early, treat it adequately, and follow up the results of therapy. The hypertension developed as a secondary result of destruction of kidney tissue with terminal renal and cardiac failure. The albuminuria might make one think of amyloid disease, but the rest of the picture does not fit as well as with pyelonephritis.

The terminal cerebral episode is not easy to untangle. One would immediately suspect hypertensive encephalopathy, which commonly occurs in persons with chronic pyelonephritis. Headache is a prominent symptom, and this syndrome usually is sudden in onset with a sustained increase in blood pressure, and the presence of exudate and

papilledema, none of which had been noted in this patient. It is not clear whether the symptoms of hypertensive encephalopathy are due to edema of the brain or to excessive vasoconstriction. Furthermore, the spinal fluid pressure is usually within the normal range with only a slight increase in spinal fluid protein. The xanthochromia of the spinal fluid would make one think of subarachnoid hemorrhage, and the patient did have a bleeding tendency, but the absence of crenated red cells, lack of stiffness of the neck, and the signs suggesting involvement of brain substance rather than meninges would point away from hemorrhage as the cause of the convulsions. One must, of course, think of an acute meningitis metastatic from the kidney through the blood stream. Escherichia coli meningitis due to a spread from the urinary tract does occur, but is most common in children under three months of age. The cerebral symptoms beginning concomitantly with fever and progression to coma might suggest a brain abscess metastatic from the kidney, but the absence of localizing neurologic signs does not support this diagnosis.

Septicemia due to gram-negative bacteria is a frequent complication of urinary tract infections. In older persons, particularly men, the blood stream infection is accompanied by profound shock as a result of the liberation of lipid-containing endotoxin. Blood pressure readings are not recorded terminally, but persistent coma suggests a generalized encephalitic process rather than simply hypotension. The absence of white blood cells in the spinal fluid would point toward a vascular rather than infectious mechanism. Torula meningitis is chronic and persists over weeks or months; so this etiology is unlikely. The ulceration of the tongue would make one think of histoplasmosis since a lesion in this site is a frequent portal of entry. The incidence of clinical infection in adults is four times as great in males as in females, however, and the incidence of skin reactors to histoplasmin in Florida is low compared with other parts of the country. These facts coupled with the absence of enlarged lymph nodes make this etiologic agent unlikely. Toxoplasmosis is another cause of an acute encephalitic disease in adults. It is accompanied by pneumonia, but the absence of a spotted fever-like rash and lymphadenopathy makes this etiologic agent unlikely. Sarcoid may give nodular lesions in the lung, but the low blood calcium and the absence of hyperglobulinemia, as well as the acute character of the cerebral symptoms, make this disease unlikely. One must think of a tumor, but from the x-ray description and clinical course it would not be primary in the lung, and no other site is implicated.

The weight of evidence favors pyelonephritis with terminal septicemia.

Clinical Diagnoses

Chronic pyelonephritis with exacerbation
Hypertensive cardiovascular disease
Intracerebral hemorrhage

Dr. Harrell's Diagnoses

Chronic pyelonephritis
Septicemia
Hypertensive cardiovascular disease

Dr. D. R. Shanklin (Assistant Professor of Pathology):

This 29 year old Negro multiparous woman died of complications of chronic renal disease. Her clinical course was, for at least the 12 years following the notation, characterized by an elevated blood pressure during the first of five pregnancies. This course is somewhat comparable to that in Weiss and Parker's case 7. Many patients with progressive chronic pyelonephritis do not live this long, and the severity and extent of tissue changes outside of the kidney may be correlated with this prolonged course.

Our clinical data in this case do not allow a diagnosis of pre-eclamptic toxemia in the first pregnancy. While chronic renal disease undoubtedly produces a toxemia syndrome in subsequent pregnancies, there is no clear evidence that first attacks of pyelonephritis are accompanied by the toxemic syndrome, neither that toxemia induces permanent renal damage of the pyelonephritic type.

The kidneys demonstrate the classic late stage of chronic pyelonephritis with focal acute suppurative nephritis superimposed. The diagnosis rests on a profound interstitial fibrosis and chronic inflammatory component; numerous foci of "colloid cyst" tubules; nodules of dilated, hyperplastic tubules; perivascular and periglomerular fibrosis; hyaline and fibrous arteriosclerosis, largely of the interlobular vessels rather than arterioles; marked capsular adhesion; and grossly, pale shrunken kidneys with variable scars, obliteration of corticomedullary junctions, and a combined weight of 80 Gm. Both are equally involved. The renal lesion has progressed through its vascular and fibrous effects to secondary changes in glomeruli which consist of focal lobular fibrosis, some adhesions across Bowman's space, and in some instances, pseudotubular crescent formation. While

these suggest chronic glomerulonephritis, the overall pattern of disease does not support that as a primary diagnosis, as do not also the gross weight and appearance. Fresh suppurative nephritis and hemorrhage into tubules are present in an irregular fashion. A few calcospherites are seen.

Uremia may be said to be present on clinical grounds; frost and fibrinous pericarditis are not present at autopsy. Further, the lungs are the site of an extensive bronchopneumonia, rather than the coarsely "nodular" edema often seen in uremia. The heart weighs 350 Gm., with a left ventricular wall of 1.8 cm., roughly twice the normal size for a woman of this age. Gastrointestinal ulceration is not present. There has been a marked suppression of bone marrow activity. The marrow is diffusely hypoplastic, despite the stimulation of the profound anemia and the recent infection. Megakaryocytes are infrequent in the marrow, correlating with one facet of the coagulation deficit which has led to bleeding from tongue ulcers and from a segment of small bowel without ulceration.

This marrow action, however mediated, may be partially responsible for the terminal infection, through a toxic leukopenia. The patient's peripheral count, however, was adequate on the second admission. The vascular insufficiency of the kidney may play a role. Just as a large abscess cannot be sterilized by circulating antibiotics alone, so perhaps a scarred ischemic kidney with acute focal suppuration. While a precise distinction cannot be made between the bronchopneumonia as primary versus the kidney, the localization of the pneumonia is not hypostatic as one might expect from the general clinical state, but involves the upper lobe and suggests embolic origin from the kidney. In either event, sepsis was beyond antibiotic control. The brain is riddled with microabscesses up to 3 mm. in diameter in the brain stem and all parts of the cerebrum and basal ganglia. Their contribution to the terminal coma is obvious, and histologically they are consistent with the terminal history. Many are hemorrhagic, but only small, rare and focal hemorrhages are found on the surface of the brain to explain the xanthochromia. These abscesses and the sepsis explain the terminal decompensation without major alteration in the chemical status of the blood. This explanation is further substantiated by the pancreas, which shows simply profound nutritional atrophy and no acinar change common in dehydration, particularly that of uremia.

Perhaps most interesting in terms of the profound nature of the renal disorder is the marked parathyroid hyperplasia with all four glands markedly enlarged up to 1 by 0.5 cm. These show some oxyphil aggregates and marked chief cell hyperplasia. Some transition to clear cells is present. The cortical bone shows an extensive but as yet early osteoclastic resorption. The liver shows an interesting fibrosis irregularly in the lobules. This is similar to that described by Moschcowitz in hyperthyroidism, but we have no historical lead or histological finding with which to relate this change.

In summary, this patient, aged 29, had chronic pyelonephritis with a number of the systemic effects of that state. Despite the hypertension, arteriolar changes are absent from other organs; thus the case does not fit the category of "pyelonephritis lenta" of Saphir and Cohen, and neither does it seem to fit the picture of hypoplastic kidneys nor classic renal rickets, despite the size of the organs and the age of the patient. One can only wonder, along with Weiss and Parker, whether she had renal infection in childhood.

Anatomical Diagnoses

Chronic pyelonephritis
Acute focal suppurative nephritis
"Uremia"
Bronchopneumonia, marked, bilateral
Hypertensive cardiovascular disease
Left ventricular hypertrophy
Marrow hypoplasia, generalized
Disseminated suppurative focal cerebritis
Parathyroid hyperplasia
Osteoclastic resorption of bone
Hepatic fibrosis

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If It Is Round — Is It Ringworm?

Obviously no. A round configuration is a physiologic shape. Many granulomas and tumors grow peripherally and heal in the center, producing a ring. Virus, bacterial and fungus infections have this characteristic and may form annular lesions.

The pictured eruptions are a sampling of the many skin conditions that produce a ringed appearance on the skin. So, just because it is round, do not call it ringworm.

Fig. 1. — Granuloma Annulare. An uncommon, asymptomatic disorder characterized by papules or nodules in a circinate arrangement.

Fig. 2. — Basal Cell Epithelioma. Malignant diseases of the skin frequently have an annular configuration.

Fig. 3. — Tinea Circinata. True fungus infection of the skin, properly called "ringworm."

Fig. 4. — Impetigo. Bacterial infections may also produce "round" eruption.

Fig. 5. — Herpes Simplex. This virus infection of the skin is often characterized by ringed lesions.

Fig. 6. — Pityriasis Rosea. A common dermatosis characterized by oval patches of a papulosquamous eruption following lines of cleavage. Large lesion on the right side is the "herald patch."

Prepared by the Committee on
Scientific Exhibits
Florida Society of Dermatology



(1)



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President's Page

"... Be It Therefore Resolved ...."

This past year the people of this country won a brief respite from government control of the practice of medicine. Since the new year, 1963, will most certainly bring a renewed battle over the same issues, there are several resolutions that the members of the medical profession might very well make. There are a few things we should resolve to do without not only for this year, but forever:

The fireman syndrome—it is a paradox that a profession whose basic tenet is the importance of *preventing* disease, of *early* detection of cancer, of *avoiding* accident, rarely reacts to anything less than a four alarm fire when its own socioeconomic or political interests are involved. We have been so busy trying to put out or to control the fire that we have on many occasions failed to put our considerable talents to work on preventive action. Consequently, we have been cast in the role of negativists, as being against everything and not for anything. We should now make a critical study of the problems facing our profession, to determine what is wrong, what is possible, and what is to be done about it. Then *do* it before the fire begins. We must have long term, constructive, anticipatory planning.

Malignant, rugged individualism—by nature all doctors are individualists, but individuality must be expressed with due regard for the rights of others and for the good of the whole. There is no freedom, no individuality without responsibility. If everyone were free to drive on the highways as he pleased without regard for the rights of others, there would not be an increase in freedom, only death and disaster. A doctor who thinks his overcharging is nobody's concern but his own is not only deluding himself, he is trading on the good name of his fellow practitioners as well as demeaning the public image of the medical profession. All too often such people are highly competent doctors who would not think of doing anything unethical but whose irresponsibility probably does more harm to the profession than a breach of medical ethics. Competence without conscience, without a sense of responsibility, is a very dangerous thing. We *are* our brother's keeper. None of us is a free agent, and there is no room for the rugged individualist in medicine if his individualism means a disregard for his obligation and his responsibility to his profession and to his fellow physician.

The stand-pat complex—it is a true, if trite, saying that "still water stagnates." The whole world has been caught up in social, economic, intellectual changes, the like of which is unprecedented in history. Recently I read that five per cent of the total number of people ever born on this earth now live on it. This fact alone, if true, presents problems which to our grandfathers would have been inconceivable. We may look with nostalgia to the good old days, but it is unrealistic to expect the world to stand still for the doctor and not for anybody else. The nature of the practice of medicine is, and will constantly be, in a state of flux. We cannot fail to provide leadership in controlling constructively the direction it takes. It is not sufficient to be satisfied with the status quo. If we do not change with the times, they will change without us.

Apathy—this has three forms, all equally bad: "I don't care-ism," "So what-ism," "There is nothing I can do about it-ism." The collective attitude of doctors that any and every patient is worth their best efforts has given this country the highest quality of medical care the world has ever known. An apathetic attitude in a good doctor toward his sick patient is unthinkable. There is no doubt that the vast majority of doctors firmly and sincerely believe that we have in this country the very best system of medical care. What we need, then, is a little evangelistic fervor in bringing to our patients, the public, the message of the miracle of modern American medicine. We have a great and true story to tell, but it will take zeal, not apathy, to tell it.

One famous politician has suggested that to move forward is the most desirable aim in life. With this we do not agree. Neither moving forward nor standing still is necessarily good or bad, but we need now to decide just what direction we want to take, what our objectives will be, and then strive to accomplish these with all the ardor—and more—that is shown by those who would destroy us.

Robert E. Gellner

Association News

Know Your Council Chairmen

In order that the members of the Association may know the men who are serving as chairmen of the 10 Councils, The Journal is pleased to present short biographical sketches of them. They were appointed by Dr. Robert E. Zellner, President, and will perform the various tasks assigned to their Councils until the Annual Meeting in May, which will be the termination date of their current appointment.

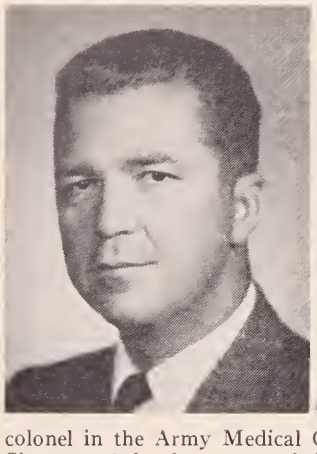
Thomas Corwin Kenaston Sr., M.D., of Cocoa, was this year named chairman of the Council on Allied Professions and Vocations. Born in Nebraska in 1903, Dr. Kenaston had his academic and professional training in his native state, receiving the degree of B. Sc. in Medicine in 1925 and the M.D. degree in 1927 from the University of Nebraska, Omaha. After serving an internship at St. Luke's Hospital, Jacksonville, he entered the practice of general medicine in Cocoa and has continued to practice there for 33 years. A veteran of World War II, he was a lieutenant commander in the Naval Reserve and served for two years as chief medical officer of the U.S.S. Colbert. In the Association Dr. Kenaston has held the posts of Third Vice President, First Vice President and chairman of the Committee on Nursing. Currently, he is serving on two advisory committees to the State Department of Education on matters pertaining to nursing education. He is a past president of the Brevard County Medical Society.



Samuel Carnes Harvard, M.D., of Brooksville, is serving his first year as chairman of the Judicial Council. A Georgian and the son of a physician, Dr. Harvard was born in Arabi in 1902 and received his academic and professional training at Emory University, Atlanta, where he was awarded the A.B. degree in 1922 and the M.D. degree in 1930. After completing an internship at Grady Memorial Hospital in Atlanta and a residency at the Steiner Cancer Clinic of that Institution, he entered the general practice of medicine in Brooksville in 1933 and has practiced there continuously since that time. The immediate Past President of the Association and a member of the Board of Governors since 1959, he has also served the Association with distinction as chairman of the Council and of the Committee on Medical Economics, as First Vice President and as President-Elect. Since 1958 Dr. Harvard has been a member of the State Board of Medical Examiners and served as its president in 1961. Governor Collins in 1959 appointed him to membership on the Florida Citizens Medical Committee on Health. He has several times served as president of the Pasco-Hernando-Citrus County Medical Society and is also a past president of the Florida Obstetric and Gynecologic Society.



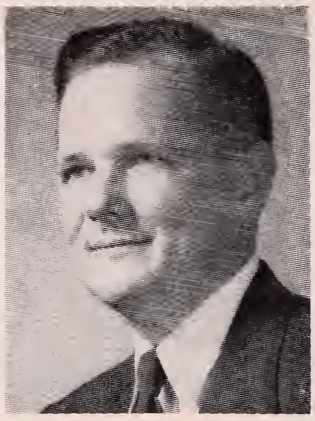
Hiram Phillip Hampton, M.D., of Tampa, has been chairman of the Council on Legislation and Public Agencies since 1959. A native Floridian, Dr. Hampton was born in Tampa in 1913. He attended Emory University, Atlanta, where he received the B.S. degree in 1934 and the M.D. degree in 1937. After serving an internship at Cincinnati General Hospital, Cincinnati, Ohio, he completed a three year residency in internal medicine at the Mayo Foundation, Rochester, Minn., and in 1941 was awarded the degree of M.S. in Medicine by the University of Minnesota. He then served four years during World War II as a lieutenant colonel in the Army Medical Corps with duty in Europe. Since 1946 he has engaged in the practice of internal medicine in Tampa. In the Association Dr. Hampton represents District B on the Board of Governors and is a member of its executive committee. Prior to assuming his present Council chairmanship he was for six years chairman of the Committee on Legislation and Public Policy and he is now chairman of the Committee on National Legislation. In 1955 he became chairman of the Committee on Indigent Hospitalization and in 1958 vice chairman of the Citizens Medical Committee on Health by appointment of Governor Collins. He has long been active on the Florida State Board of Health Service for the Indigent Program. In the American Medical Association, he has held membership on the Committee on Indigent Care since 1958 and is a member of its Speakers Bureau. He also serves on the Medical Advisory Board of the Sears Roebuck Foundation.



Floyd Kinzer Hurt, M.D., of Jacksonville, has served as chairman of the Council on Medical Economics since its establishment in 1960. Born in Marion, Va., in 1910, Dr. Hurt was educated in his native state. After completing his academic training at Emory and Henry College, Emory, he received his professional schooling at the University of Virginia, Charlottesville, where he was awarded the M.D. degree in 1935. He then served a two year internship at the Duval County Hospital, Jacksonville, and a residency in radiology at Duke University Hospital, Durham, N. C., later continuing postgraduate study as an assistant instructor in pathology at the University of Virginia School of Medicine. During World War II he served for three years in the Army Medical Corps with the rank of major. After practicing for a brief period in Lakeland, Dr. Hurt entered the private practice of radiology in Jacksonville 20 years ago and has been active in the Association since that time. Currently he is chairman of the Committee on Members Insurance and of the Florida Medical Association Investment Trust Committee. He is also a member of the board and treasurer of Blue Shield of Florida. He is a past president of the Florida Radiological Society and of the Duval County Chapter of the American Cancer Society, and is a former treasurer and president of the Duval County Medical Society. He holds membership also in the American Physicians Art Association.



Marion William Hester, M.D., of Lakeland, is serving for the second successive year as chairman of the Council on Medical Services. A native Floridian, Dr. Hester was born in Williston in 1912. He received his academic and professional schooling at Emory University, Atlanta, where he was awarded the M.D. degree in 1935. For two years thereafter he served an internship at Grady Memorial Hospital, Atlanta, followed by a three year residency in ophthalmology at that institution. During World War II he served from 1942 to 1945 as a major in the Army Medical Corps with duty in Africa and Italy. Upon discharge from military service he was an instructor in the Department of Ophthalmology of Emory University School of Medicine for a year and has since engaged in the practice of ophthalmology in Lakeland. In the Association Dr. Hester has been chairman of the Committee on Vision since 1959. He is currently president of the Florida Society of Ophthalmology and Otolaryngology and is a former secretary and president of the Polk County Eye, Ear, Nose and Throat Society. Also, he is a past president of the Polk County Medical Association and had previously served that society as secretary-treasurer.



Edward Weir Cullipher, M.D., of Miami, became chairman of the Council on Medical Education and Hospitals last year and continues to serve in that capacity. The son of a physician, Dr. Cullipher was born in Pendleton, Ind., in 1905. He received his academic and professional training at the University of Indiana, Indianapolis, and was awarded the A.B. degree in 1928 and the M.D. degree in 1932. After completing an internship and a two year residency in orthopedic surgery at the Indiana University Medical Center, he entered the private practice of medicine in Miami in 1936. He has continued to practice his specialty of orthopedics there to the present time except for a five year period from 1941 to 1946 when he served during World War II in the Army Medical Corps with the rank of lieutenant colonel. In the Association Dr. Cullipher was made chairman of the Committee on Medical Schools in 1960. He is a former vice president of the Southern Medical Association and a former chairman of the audiovisual committee of the American Academy of Orthopaedic Surgeons. In the Dade County Medical Association he has held such key offices as chairman of the economics and public relations committees, vice president and president. He holds the faculty post of Clinical Professor of Orthopedic Surgery at the University of Miami School of Medicine.



Thaddeus Mortimer Moseley III, M.D., of Jacksonville, has since 1960 been chairman of the Scientific Council. Born in West Point, Miss., in 1919, Dr. Moseley attended the University of Mississippi, Oxford, and was awarded the A.B. degree in 1939. Four years later he received the M.D. degree from Vanderbilt University, Nashville, Tenn., and completed an internship at Vanderbilt University Hospital before entering active military service. During World War II he served from 1943 to 1946 as a surgeon in the Army Medical Corps with the rank of captain and participated in the European campaign. Upon discharge from military service he returned to Vanderbilt University Hospital where he was assistant resident in surgery for three years and senior resident surgeon for one year. After completing additional postgraduate training in gynecology at the Medical College of Virginia, Richmond, in 1950 he entered the private practice of general surgery in Jacksonville. In the Association Dr. Moseley served as chairman of the Committee on Scientific Work during 1959, 1960 and 1961, and since 1961 has served as Editor of The Journal of the Florida Medical Association. He has also been active in the Duval County Medical Society, serving as chairman of the committee on civil defense for three years and currently as chairman of the program committee for 1962.



Williams Dean Steward, M.D., of Orlando, was appointed chairman of the Council on Special Activities this year. Born in 1914 in Augusta, Ga., and educated there, he was graduated from the Junior College of Augusta in 1932 and received the M.D. degree from the Medical College of Georgia in 1936. He then served an internship at Baroness Erlanger Hospital, Chattanooga, Tenn., and residencies at the C. & O. R. R. Hospital, Clifton Forge, Va., and the Pine Breeze Tuberculosis Sanatorium, Chattanooga. He engaged in the private practice of medicine in Doltewah, Tenn., for a year before entering military service in 1940. Upon discharge from military duty in 1946, after serving as a major in the Army Medical Corps with duty in the Central Pacific area, he continued postgraduate study by completing a residency at Jefferson Medical College Hospital, Philadelphia. While in the service he also had special training at the Army School of Tropical Medicine. Since 1946 he has practiced his specialty of internal medicine in Orlando. In the Association Dr. Steward is chairman of the Committee on Liaison with County Medical Societies. He is also vice president of Blue Shield of Florida. A past president of the Florida Society of Internal Medicine, he currently represents that society in the American Society of Internal Medicine. He is a member of the executive committee of the Florida Arthritis and Rheumatism Association and a past president of the Orange County Heart Association. A former president and chairman of the public health and legislative committees of the Orange County Medical Society, he is presently a member of its board of censors and chairman of the health insurance mediation committee.



Emmet Fewell Ferguson Jr., M.D., of Jacksonville, is serving his first year as chairman of the Council on Specialty Medicine. A native of Georgia, Dr. Ferguson was born in DeSoto in 1921. He had two years of premedical training at the University of Georgia, Athens, before entering the U. S. Naval Academy, Annapolis, Md., in 1940. Awarded the B.S. degree by that institution in 1943, he then served during World War II in Naval Aviation for three years with duty in the European area. Upon discharge from military service in 1946, he entered the Medical College of Georgia, Augusta, where he was awarded the M.D. degree in 1950. He then interned at the U.S. Naval Hospital, St. Albans, Long Island, N.Y., served residencies at the Duval Medical Center, Jacksonville, and the University of Alabama Hospitals, Birmingham, and was chief resident at the Duval Medical Center in 1954. Since 1955 he has engaged in the practice of general surgery in Jacksonville. In the Association Dr. Ferguson has been a member of the Medicare Committee since 1959. Since 1960 he has been secretary-treasurer of the Florida Association of General Surgeons and is currently vice president of the Duval County Unit of the American Cancer Society. In the Duval County Medical Society he has served as chairman of the insurance and education committees and since 1960 has been chairman of the indigent care committee.



Mason Romaine III, M.D., of Jacksonville, serves as chairman of the Council on Voluntary Health Agencies. A Virginian, Dr. Romaine was born in Petersburg in 1922 and was educated in his native state. He received the A.B. degree from Randolph - Macon College, Ashland, in 1942 and the M.D. degree from the University of Virginia, Charlottesville, in 1945. He spent the next five years in New York City successively as an intern, New York Post Graduate Hospital, assistant resident in pathology, Bellevue Hospital and New York University College of Medicine, assistant resident in medicine, Memorial Center for Cancer and Allied Diseases, research fellow and assistant resident in medicine, Cornell Division Electrolyte Laboratory, Bellevue Hospital, and fellow in cardiology and assistant in medicine, New York Post Graduate Medical School and University Hospital. He served in the Navy during World War II and later attained the rank of commander in the Naval Reserve. Since 1950 he has engaged in the private practice of medicine in Jacksonville, specializing in cardiovascular disease. In the Association Dr. Romaine has held his present Council chairmanship since 1960. He is a past president of the Florida Heart Association and in the Duval County Medical Society is currently chairman of the committee on liaison with the local Heart Association and is a former chairman of the telephone committee. He also serves as chairman of the Joint Policy and Coordinating Council for Cardiovascular Disease.



Eighty-Ninth Annual Meeting Designated "Million Dollar" Session By Association's Board of Governors

To focus the attention of each member of the Florida Medical Association on the importance of, and the value to be derived from, the Annual Meeting on May 16-19, 1963, at the Diplomat Hotel in Hollywood-by-the-Sea, the Board of Governors has designated the Eighty-Ninth Annual Session as a "Million Dollar Meeting." The Board noted that there had been many memorable and successful Annual Meetings; however, in recent years because of a variety of factors, attendance and interest in the program offered at this spring meeting have been decreasing. One encouraging factor, however, has been the increase in the number of physicians attending the scientific sessions and the increase in the number of scientific exhibits.

To encourage attendance this year, the Board voted to offer three awards for those in attendance at the meeting and visiting at least 40 technical exhibits. The first will be one day's interest on one million dollars at 11 per cent, or $301.00; the second will be one day's interest at 5.5 per cent, or $150.50, and the third one day's interest at 2.75 per cent, or $75.25. The awards will be presented at the close of the exhibit visitation on Saturday afternoon, May 18.

Fourth Biennial State Medical Journal Editor's Conference

Experts in the fields of typography and design, use of color, organization of professional and lay staffs, legislation regarding pharmaceutical advertising, and selling advertising for medical journals were presented profitably to make the program for the Fourth Biennial State Medical Journal Editors' Conference in Denver, Colo., early in November well worth while. Approximately half the program was concerned with the practical aspects of publishing.

In the discussion of the use of color, the opinion was expressed that journals, as organs in the teaching-learning process, should not confine themselves primarily to informing their readers, but should explore means of disseminating medical knowledge in order that there may be learning as well as information. It was pointed out that many scientific articles being published may have no place in the journal and that, in fact, the time may have come when material upon a particular subject should be presented in a manner peculiar to teaching and be requested.

Within the organization of the journal's staff, teamwork should be stressed. It is important that each member understand his job and undertake it with the knowledge that the task has its important place within the framework of the organization. The number of staff members will depend upon the function of the journal, as it is understood by the editor, and upon his choice as to how best to accomplish this function.

In a discussion of the drug legislation of 1962 as approved in final form by the Senate on October 3 and by the House on October 4, the manner in which pharmaceutical advertising will be affected was explained. In the interpretation of the new drug law, prepared by the Department of Health, Education, and Welfare, prescription drug advertisements must have (1) the "established name" of the drug in half as large type as that used for the brand name, (2) the drug's quantitative formula to the extent required on the drug label, and (3) a true and nonmisleading brief summary of information as to adverse side effects, contraindications, and effectiveness of the drug for the guidance of physicians, as required by regulations. Prior submission of the contents of an advertisement for approval may be required only in extraordinary instances, but this provision is not intended to limit the authority of the Food and Drug Administration to review proposed advertising matter voluntarily submitted for review before publication.

In an opinion as to the reason behind the bill, which becomes effective for advertising in May 1963, it was explained that the legislation could have arisen out of a basic distrust of scientists because of the seemingly unlimited power of their discoveries. Selected instances of reactions to drugs prominently reported at the time the bill was being considered by the Congress were used to advantage, it was pointed out, although most could have been reported previously, the facts having been available for some time.

In the competition for advertising revenue, it was emphasized that the best product would win. The editors were urged to study the appearance of their advertising pages and be guided in maintaining a similar design throughout each issue. They were told that to survive they must explore differing means of presenting scientific material, so that the subject matter will lead the practitioner of medicine to anticipate each succeeding issue.

Association Meetings



Fifth Annual Conference County Medical Society Presidents and Secretaries January 12 and 13, 1963

For the fifth consecutive year, the incoming presidents and secretaries of the component county medical societies of the Florida Medical Association will gather at the Hotel Robert Meyer in Jacksonville on January 12 and 13 for the conference sponsored annually for them by the Association. Planned to orient these officers at a time when they are taking office for the new year, the program is informative and stimulating and will be helpful to all county society officers. This conference has evoked wider interest each year, and every society will profit by having its president and secretary and as many other officers as possible present.

The program for the opening session on Saturday afternoon covers the national scene, state indigent care programs, workmen's compensation fee schedule, Association membership programs, Blue Shield and a panel discussion on rural problems. On Sunday morning, after a presentation of some medicolegal considerations of particular interest, county society activities and the programs and problems at the county and state level will be discussed.

Theme: "Florida Medicine in the Space Age: Are We Up to Date?"

SATURDAY MORNING — JANUARY 12

10:00 a.m. Tour of Blue Shield Building, 532 Riverside Avenue

12:00 noon Lunch, Blue Shield Building (Blue Shield Host)

SATURDAY, JANUARY 12 — AFTERNOON SESSION, WINDSOR ROOM NORTH

1:00 p.m. Registration
Presiding—Robert E. Zellner, M.D., Orlando, President, FMA

2:00 p.m. Call to Order, Welcome and Introductions—Dr. Zellner

2:10 p.m. "How We Doing?"—F. J. L. Blasingame, M.D., Chicago, Executive Vice President, American Medical Association

2:40 p.m. Discussion

2:50 p.m. "What We Have and What We Need: Florida's Indigent Care Programs and Further Kerr-Mills Implementation by the Legislature"—Samuel M. Day, M.D., Jacksonville, Secretary-Treasurer, FMA

3:10 p.m. Discussion

3:20 p.m. Report on the Private Practice of Medicine in Puerto Rico, Courtlandt D. Berry, M.D., Orlando

3:35 p.m. "The FMA Relative Value Studies and the Workmen's Compensation Fee Schedule: What's Been Done and Where We S and"—Henry J. Babers Jr., M.D., Gainesville, Chairman, FMA Committee on Fee Schedules

3:55 p.m. Discussion

4:05 p.m. "What Your State Association Has to Offer: Benefits of FMA Membership Programs" —Floyd K. Hurt, M.D., Jacksonville, Chairman, FMA Committee on Members Insurance

4:15 p.m. Discussion

4:20 p.m. "Who's Chasing the Blues? Where Blue Shield Has Been and Where It's Going"—John D. Milton, M.D., Coral Gables, Chairman, Professional Relations Committee, Blue Shield of Florida

4:40 p.m. Discussion

4:45 p.m. Five Minute Break

4:50 p.m. "Medicine Down on the Farm: What We Have in Common with Our Friends in Agriculture"—Panel Discussion

Moderator—J. Basil Hall, M.D., Tavares, Chairman, FMA Committee on Rural Health

Panelists—T. K. McClane Jr., Gainesville, Executive Vice President, Florida Farm Bureau Federation

George W. Karelas, M.D., Newberry, Member, FMA Committee on Rural Health

Francis T. Holland, M.D., Tallahassee, Member, AMA Council on Rural Health

5:30 p.m. Discussion and Adjournment of Afternoon Session

6:30 p.m. Social Hour—Mezzanine

7:30 p.m. Dinner—Windsor North

SUNDAY, JANUARY 13 — MORNING SESSION, WINDSOR ROOM NORTH

Presiding—Warren W. Quillian, M.D., Coral Gables, FMA President-Elect

9:00 a.m. "What's Legal and Illegal: Some Points Your Society Should Watch"—Harry T. Gray Esq., Jacksonville; Marks, Gray, Yates, Conroy & Gibbs, FMA Legal Counsel

9:10 a.m. Discussion



Home Nursing Care in Florida

Home nursing service is not a new development. The first visiting nurse association was started in Buffalo, N. Y., 77 years ago. Presently such associations are found in almost all states and in many of the larger cities. These associations, which provided nursing care to the sick in their homes under the direction of the family physician, have had a long and honorable history and today are serving as prototypes for newer and expanded nursing services.

In the early years all visiting nurse associations were independent organizations financed through a combination of fees and donations. Somewhat later, some of these home nursing programs were coordinated with the nursing activities of the official city or county health departments, whereby services were extended and duplication avoided. Still more recently, existing or newly organized visiting nurse associations have, by mutual agreements, combined with the official health departments providing one united community nursing service. In the absence of a visiting nurse association some public health nursing programs have been extended to include bedside nursing visits in the home. Thus, in Florida there exist at present the independent visiting nurse association, as in Jacksonville, the coordinated service, as in Pinellas County, the combined program, as in Sarasota County, and the extended public health nursing service, as in Clay County.

Visiting nurse associations in Florida have been established only in the larger or more affluent urban communities. The smaller towns and rural areas were left without organized provision for home nursing care of the ill, except where the public health nurse gave limited bedside nursing. Such bedside care was never officially a part of her duties.

After extended public hearings had recorded almost unanimously favorable opinions, the Congress, in the late days of the 1961 session, passed the so-called Community Health Services and Facilities Act. The intent of this Bill was to provide new or expanded out-of-hospital health services, particularly for the chronically ill or aged, such as home nursing care, rehabilitation services, homemaker aid and programs to improve various aspects of nursing home care.

In Florida, the first visiting nurse association was organized in Jacksonville in 1943. Over the intervening years other home nursing services were established, so that by the close of 1961, there were 16 programs functioning in Florida. Some were independent, some coordinated, some combined, and three were extensions of the public health nursing program.

In 1957, the State Board of Health provided funds with which to demonstrate home nursing services for rural areas. Sufficient monies were made available to carry this program out in three areas, Baker and Clay counties and a limited rural area in western Palm Beach County. The program had the endorsement and support of the physicians in these particular areas. Subsequently, additional resources were requested of the state legislature, but funds for expansion of programs were not appropriated. Thus, when they were provided through the appropriation for the Community Health Services and Facilities Act, the State Board of Health thought that they should be made available to extend home nursing programs, the importance of which was so generally acknowledged. Major emphasis was directed to developing these services in the more rural counties.

In mid-December information relative to this newly authorized program was available. This was discussed fully at a meeting with all county health officers and their nursing supervisors. At that time, sufficient funds were available to em-

ploy 28 additional nurses for the extension of this home nursing program. Health officers who thought their communities would be interested in initiating or expanding this program were advised to discuss it with all groups concerned. For the development of new programs, they were requested to proceed as follows:

1. Obtain the approval of the Board of County Commissioners.
2. Secure the endorsement of their local medical society or local physicians.
3. Seriously consider the formation of a local advisory committee.
4. Enlist the wholehearted cooperation of their own nursing staff.
5. Submit a brief proposal as to how this program was to be established.
6. Make a formal request for support of additional nurses needed to carry out their proposed program.

Where this program was to be developed as an extension of the public health nursing program, certain definite policies were specified:

1. Nurses employed must meet Merit System requirements as to education, training and experience and be licensed in Florida.
2. All patients given home care must be under the medical supervision of a licensed practicing physician.
3. Only such nursing procedures as are ordered by the patient's physician were to be carried out.
4. Referrals would be accepted from all sources. However, when the referral is made by someone other than the patient's physician, the nurse would be authorized to make a single home visit to evaluate the situation, to ascertain if there is a family physician, to assess the urgency of need for medical attention and to determine how the patient could best be put in touch with a physician. In emergency cases she would telephone either the health officer or a practicing physician, report the situation and obtain instructions.
5. If fees for services are to be collected, they must be handled and accounted for as required by the State Comptroller.

The advisory committee, referred to previously, may be composed of interested and knowledgeable lay people or of practicing physicians or both. If the committee is made up of lay people, then there should be also a small medical advisory committee. The lay advisory committee would have as its primary functions:

1. Public education relative to home nursing services.
2. Exploration of other possible home care programs.
3. Equipping, maintaining and supervising "Loan Closets."
4. Receipt and handling of funds, including those from community chests.
5. Stimulate, promote and maintain general public support of related worthwhile community medical and health programs, namely, hospital improvements and/or expansion, nursing home facilities, blood banks and others.

The medical persons on this committee or on the special medical advisory committee would recommend administrative policies, help to establish the standing orders for the guidance of the nurses, set medical policies, act as a liaison group between local physicians and the nursing staff and give advice in emergencies or unusual situations.

In addition to encouraging new programs, attention was directed also to supplementing established ones. It has been possible to provide aid to independent visiting nurse associations and to coordinated or combined programs requesting assistance. This made it practicable, for example, for the Jacksonville visiting nurse association to add three additional nurses and to increase services by 30 per cent beginning in March 1962.

Additional services which are a part of well developed home care programs have been explored also. The possibility of making rehabilitative nursing services available in the home has been examined with the Florida Society for Crippled Children and Adults, Inc., and a cooperative approach is evolving. The plan and organization of homemaker care, which is particularly well developed in New Jersey, have been studied in association with the State Department of Public Welfare, the Home Demonstration Agents and representatives of local communities and groups.

There have been misunderstandings in this interval of rapid expansion of home nursing service made possible by additional federal funds. The use of such funds for programs for the aged has been questioned in this time of intense controversy over the entirely unrelated medical care

program for the aged. Present attitudes accept aid for maternal and child health, crippled children, cancer control and a variety of established programs, but there is understandable caution when health care of the aged is involved. Also, there have been instances when, through misunderstanding, it appeared that the intent was to replace, rather than cooperate with, independent visiting nurse association programs. More deliberate and full discussion could have prevented, and will be needed to overcome this problem.

The hopes, purposes and future goals of the State Board of Health are entirely in line with the statement in the report of the Committee on Public Health of the Florida Medical Association as endorsed by the House of Delegates of 1962 as follows:

"The Committee reaffirms the strong endorsement and support of the Florida Medical Association in the planning, development and implementation of home care programs in the various counties of Florida. It does so with the understanding that these programs will be organized and controlled at a local level to best meet the needs of the local area and will not lead to duplication of existing services or agencies."

Albert V. Hardy, M.D.
Acting State Health Officer
Jacksonville

Do As I Say?

The Board of Regents of the American College of Chest Physicians, after considerable study and deliberation, has passed a resolution supporting the evidence of the association of cigarette smoking with various respiratory disorders. It also has requested the members of the College, as well as all other physicians, to direct attention, particularly of young people, to the dangers of excessive smoking. Statistics demonstrate that most physicians agree with this resolution.

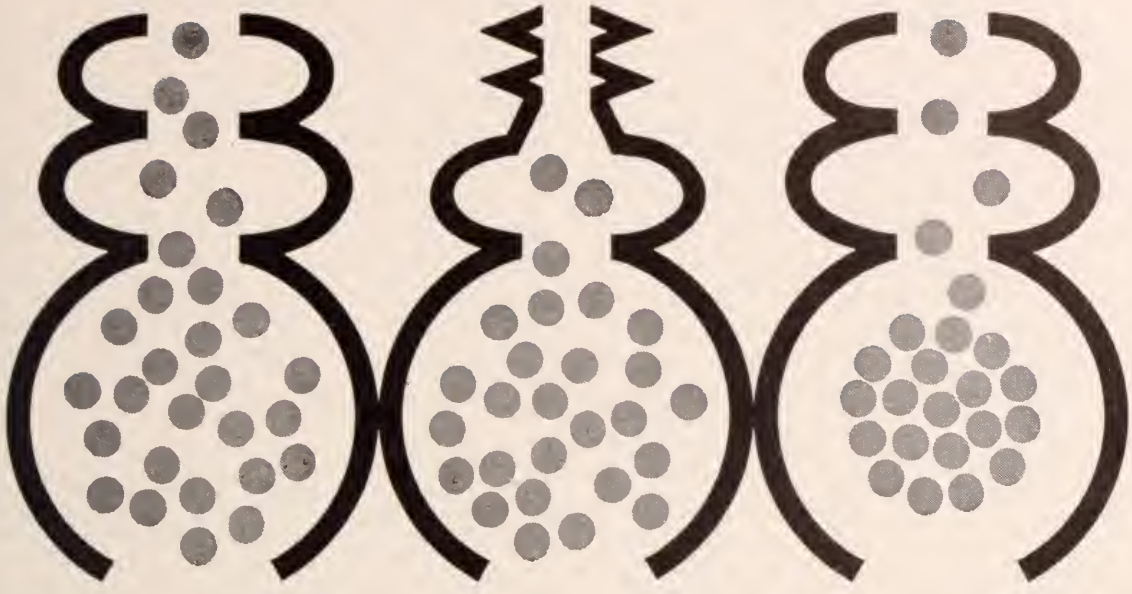
Thinking he would do his part in complying with the request from the College, a colleague explained to his patient of junior high school age, in the presence of his father, the medical complications which might arise from indulging in what had become a problem in the particular school—cigarette smoking. The boy had been attentive to the explanation as to why he should not smoke, and the physician, no doubt feeling some small sense of pride, then spoke briefly of other matters. As the patient and his father were leaving, the physician reached into his pocket and pulled out a package of cigarettes. He heard the boy say to his father as they turned down the hall, "Dad, smoking must not do all the things he said; you saw him fixin' to smoke when we left."

This incident brings to mind the old adage, "What you do speaks so loudly, I cannot hear what you say," and it could apply to more in our daily activities than the smoking of cigarettes. We closely observe our patients for it is an important part of diagnostic procedure, and conversely our patients are observing us. We are being judged not only as to our competence as practitioners of the art and science of medicine but also as to the unselfishness and honesty of our actions as individuals and as a profession.

Since the beginning of recorded history, the physician has personified quietness, stability, concern and truthfulness. These attributes he should continue to project, and one of his basic characteristics should not be indulgence in the popular pastime of unbridled expression of opinion.

A few years ago, we were being criticized for our reticence. Now we are learning to stand up and express ourselves as a profession, but progress is not necessarily inherent in change. Our image as a profession cannot rightfully be reflected by an abstract group. There must be a concrete subject—the individual physician—and when each of us takes his own measure and permits judgment to begin there, what we do will lose its shout and our patients will be able to hear and believe what we say.

T. M.



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Dosage: For *adults* the recommended initial dosage is two tablets (2.5 mg. each) three or four times daily. Maintenance dosage may be as low as two tablets daily.

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Note: Lomotil is an exempt preparation under Federal narcotic statutes.

Detailed information and directions for use in children and adults are available in Physicians' Product Brochure No. 81. G. D. Searle & Co., P. O. Box 5110, Chicago 80, Illinois.

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News

Physicians throughout Florida will have the opportunity to hear a distinguished group of speakers at the Central Florida Medical Meeting being held at the Cherry Plaza Hotel in Orlando on March 15-16. This ninth annual session is being expanded to two days for the first time in order that an entire day may be devoted to each of the topics, Pulmonary Disease and Hematology. Guest participants include Drs. William Bosworth Castle; George Richard Minots; Alexander S. Wiener; Benjamin R. Gendel; C. Gordon Zubrod; John Sealy; Ralph Tompsett; Morton Ziskind, and William Waring. Serving on the Committee on Arrangements are Drs. Albert M. Ziffer, chairman; Freeman H. Cary; William B. Cheslock; Arthur E. Corey; Edgar E. Hitchcock; Morton Levy; James D. Moody, and Thomas B. Thames, all from Orlando.

The Southeastern Surgical Congress has been scheduled for March 18-21 at the Americana Hotel, Bal Harbour, Miami Beach. Dr. A. H. Letton of Atlanta is executive secretary.

Dr. Hugh H. Hussey of Washington, D. C., Dean of Georgetown University School of Medicine, has been appointed director of the Division of Scientific Activities of the American Medical Association. Dr. Hussey also is chairman of the Board of Trustees of the Association.

Dr. Andrew E. Lorincz of Gainesville, Associate Professor of Pediatrics at the University of Florida College of Medicine, has been chosen president-elect of the Southern Society for Pediatric Research. Dr. Henry G. Cramblett of Bowman Gray School of Medicine at Winston-Salem, N. C., is president.

Drs. Banning G. Lary of Miami and William C. Ballard of St. Petersburg have been presented the Pfizer Award of Merit for their contribution to medical, health and disaster preparedness. Drs. Lary and Ballard received the wards at the 11th Annual Conference of the U. S. Civil Defense Council held at Knoxville, Tenn.

Retention of certain servicemen beyond their normal date of expiration of active duty tours has been directed by the Secretary of Defense. This may result in some dependents being with-

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out a valid identification card for some time, since the date on the card would correspond to the termination of active duty prior to the extension directed by the Secretary of Defense. In the event dependents need medical care from civilian sources under the Office for Dependents' Medical Care program before their identification cards are updated, they have been instructed to explain the situation to the phsyician and to present, if available, tangible evidence of continued eligibility. This may be allotment checks, official orders, directives or personal letters.

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Meetings

January

Seminar in Surgery, January 10-12, University of Florida College of Medicine, Gainesville

Conference of Presidents and Secretaries, Fifth Annual, Florida Medical Association, January 12-13, Hotel Robert Meyer, Jacksonville

Seminar in Pediatrics, January 31-February 2, University of Florida College of Medicine, Gainesville

February

Seminar on Psychiatry in Medical Practice, begins February 6 for 18 Wednesday nights, Jackson Memorial Hospital, Miami

Midwinter Seminar in Ophthalmology and Otolaryngology, Seventeenth Annual, February 4-9, Americana Hotel, Bal Harbour, Miami Beach

March

Watson Clinic Seminar, March 2, Watson Clinic, Lakeland

Seminar in Obstetrics and Gynecology, March 7-8, University of Florida College of Medicine, Gainesville

Central Florida Medical Meeting, Ninth Annual, Orange County Medical Society, March 15-16, Cherry Plaza Hotel, Orlando

Southeastern Surgical Congress, March 18-21, Americana Hotel, Bal Harbour, Miami Beach

Seminar on Clinical Practice, March 28-29, University of Florida College of Medicine, Gainesville

Advances in Angiography, sponsored by Department of Radiology, University of Miami School of Medicine, Fontainebleau Hotel, Miami Beach

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March 4, 5, 6, 7, 1963

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Henry J. Tumen, M. D., Philadelphia, Pa.
Gastroenterology
Logan T. Robertson, M. D., Asheville, N. C.
General Practice
Andrew A. Marchetti, M. D., Washington, D. C.
Gynecology
Raymond D. Pruitt, M. D., Houston, Tex.
Internal Medicine
Paul S. Rhoads, M. D., Chicago, Ill.
Internal Medicine
C. H. Hardin Branch, M. D., Salt Lake City, Utah
Neuropsychiatry
J. Robert Willson, M. D., Philadelphia, Pa.
Obstetrics
James I. Moore, M. D., Baltimore, Md.
Ophthalmology
James E. Bateman, M. D., Toronto, Ont., Can.
Orthopedic Surgery
Joseph H. Ogura, M. D., St. Louis, Mo.
Otolaryngology
Edward A. Gall, M. D., Cincinnati, Ohio
Pathology
Weston M. Kelsey, M. D., Winston Salem, N. C.
Pediatrics
Curtice Rosser, M. D., Dallas, Tex.
Proctology
Ted F. Leigh, M. D., Atlanta, Ga.
Radiology
John L. Keeley, M. D., Chicago, Ill.
Surgery
John L. Madden, M. D., New York, N. Y.
Surgery
Edwin P. Alyea, M. D., Durham, N. C.
Urology

Additional guest speaker to be announced
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1. Pomeranze, J.: Clinical Med. 8:1155, June 1961. 2. Krall, L. P. and Bradley, R. F.: Geriatrics 17:337, May 1962. 3. DeLawter, D. E. et al.: J.A.M.A. 171:1786, Nov. 28, 1959. 4. Perkin, F. S.: J.A.M.A. 173:36, May 7, 1960. 5. Pearlman, W.: Phenformin Symposium, Houston, Feb. 1959. 6. Radding, R. S. et al.: Metabolism 11:404, April 1962. 7. Gold, A. et al.: Applied Therapeutics 2:137, 1960. 8. Brown, G. D. and Gabert, H.: Applied Therapeutics 4:451, May 1962. 9. Gold, A.: Applied Therapeutics 4:466, May 1962.

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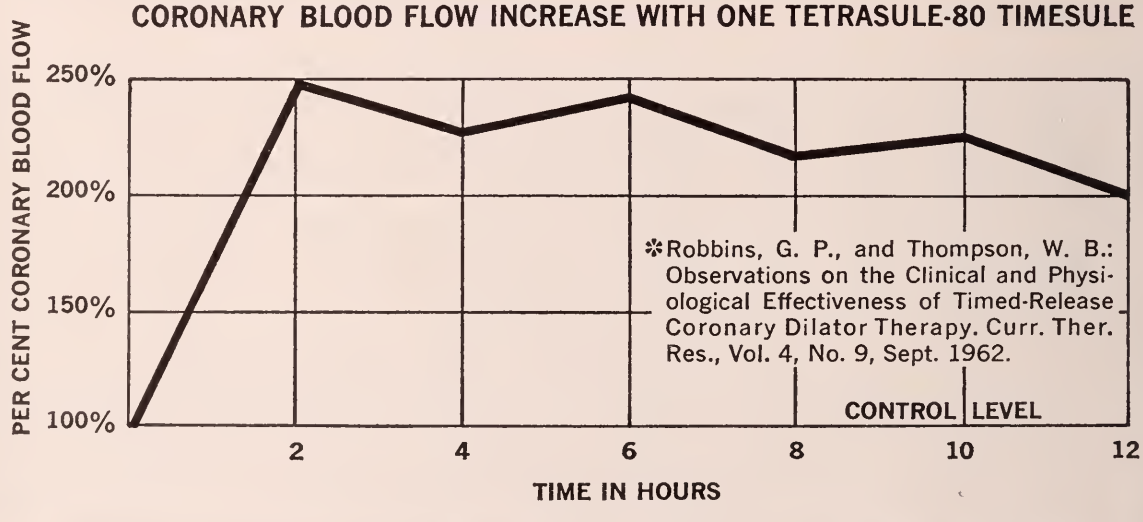


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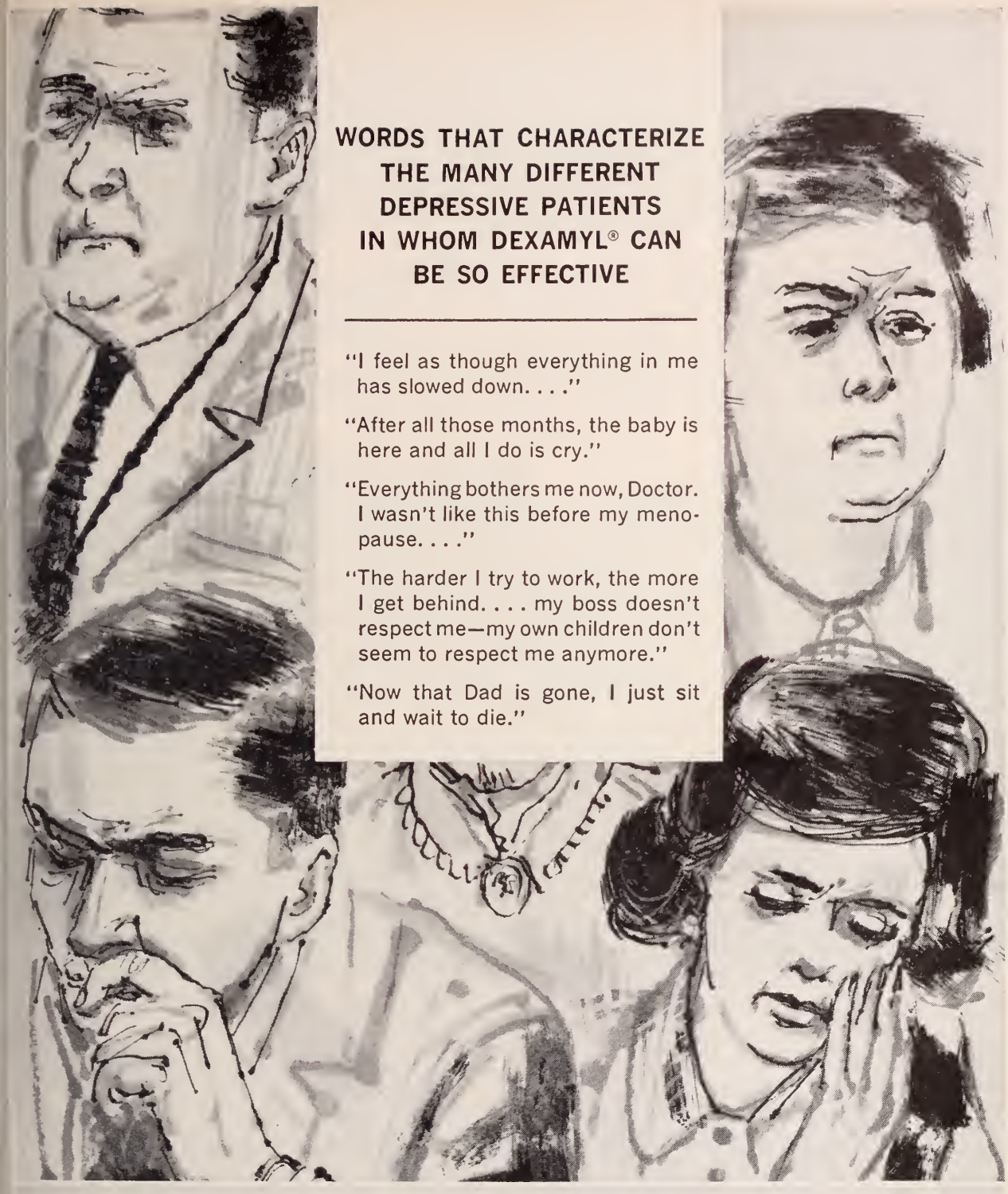
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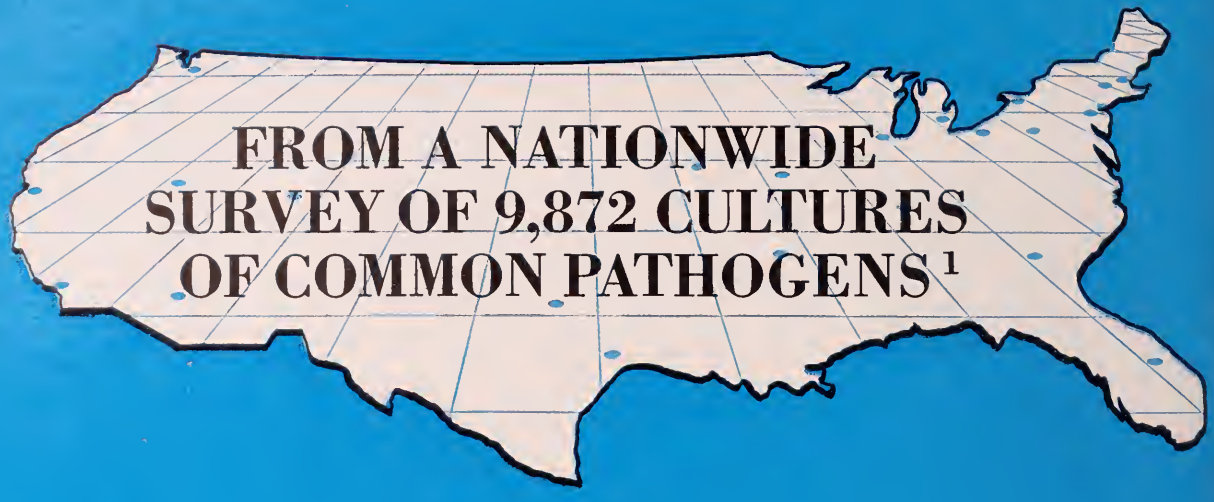
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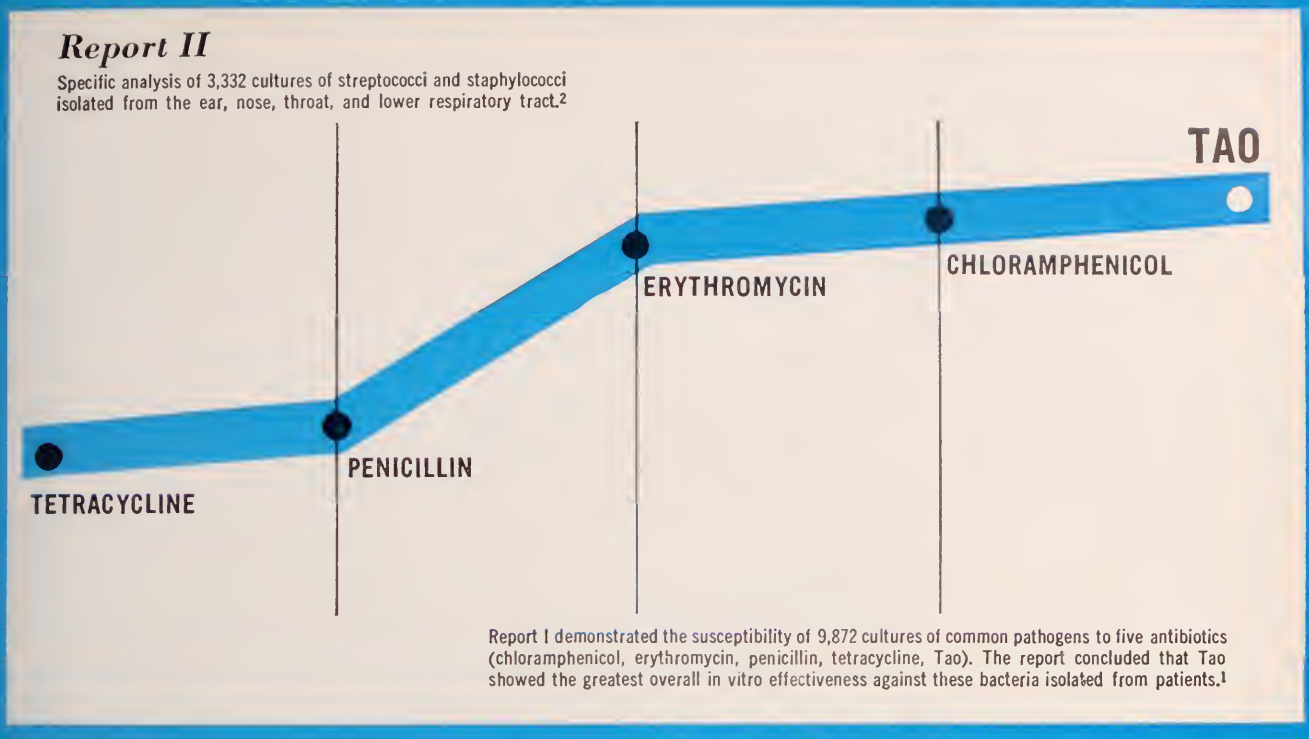
FROM A NATIONWIDE SURVEY OF 9,872 CULTURES OF COMMON PATHOGENS[1]

Conclusions of Nationwide Survey: *Report I*

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2. **Overall results showed a higher percentage of susceptibility** among these common pathogens to Tao than to the other antibiotics. Susceptibility to Tao was greatest, not only in respiratory streptococci and staphylococci, but also in these organisms isolated from skin and soft tissue (3,423 cultures), genitourinary and gastrointestinal tracts and other sources (2,458 cultures). Susceptibility was equal to all antibiotics tested in pneumococci from unspecified sources (463 cultures), and less to Tao in H. influenzae from unspecified sources (196 cultures).

3. **Tao has been used for five years without development of predictable cross resistance.** In 1958 and 1961, approximately 73% and 70%, respectively, of erythromycin-resistant problem staphylococci showed susceptibility to Tao.[3,4] The present study confirms the continuing high degree of Tao activity even against these pathogens. Of 1,592 cultures of erythromycin-resistant staphylococci, 68% were susceptible to Tao, while in the reverse situation, only 33% of 768 Tao-resistant staphylococci were susceptible to erythromycin.



Report II

Results of Bacterial Susceptibility in 3,332 Respiratory Pathogens

eferences

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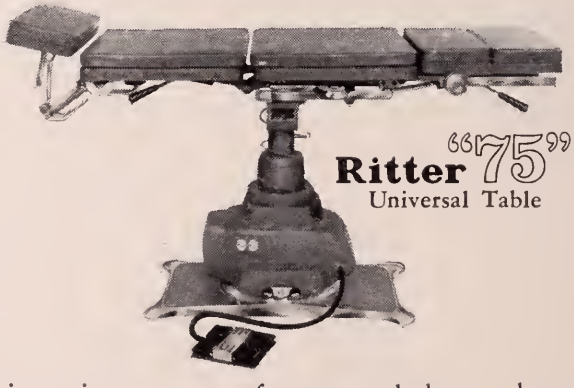
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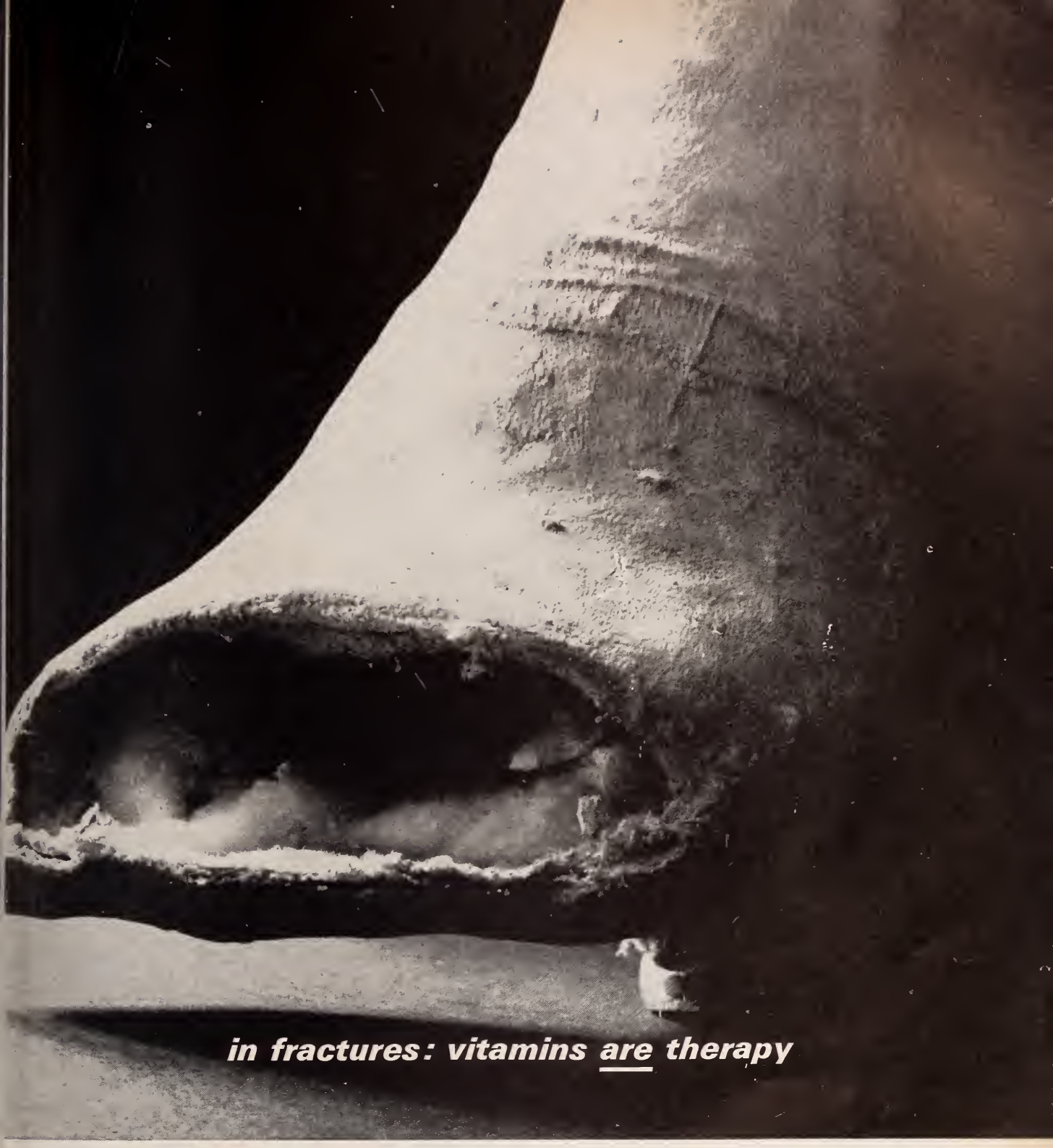


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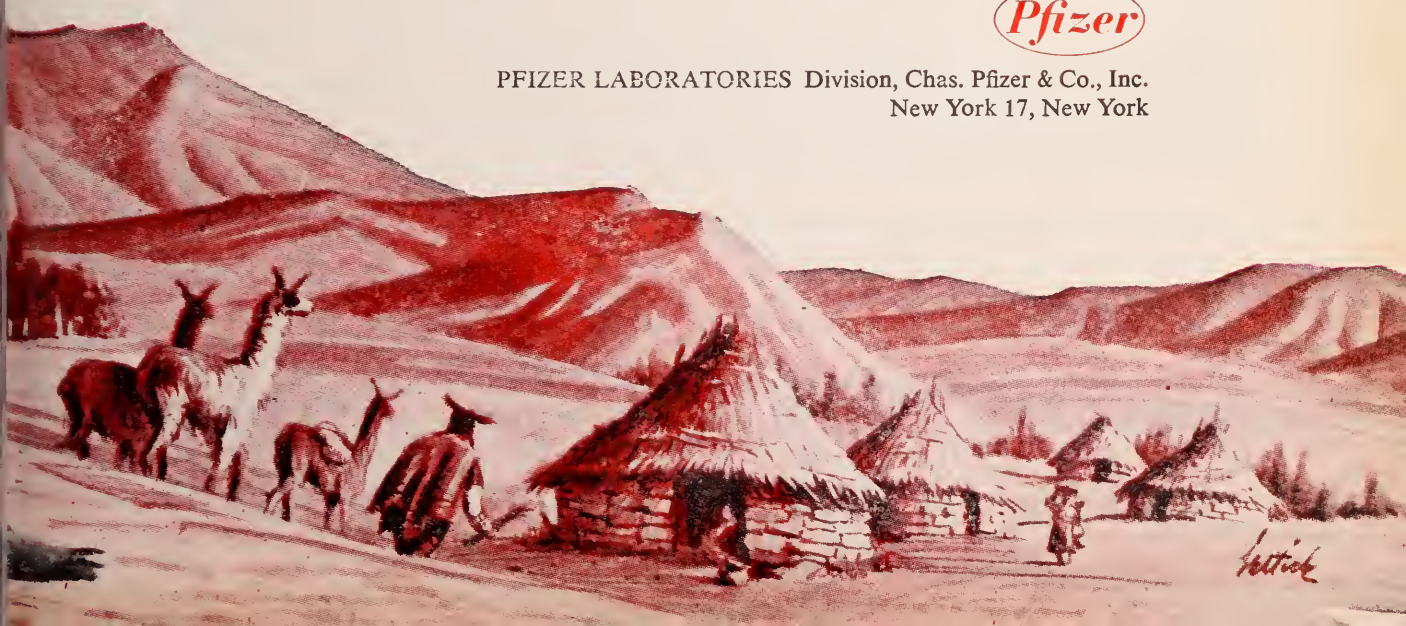


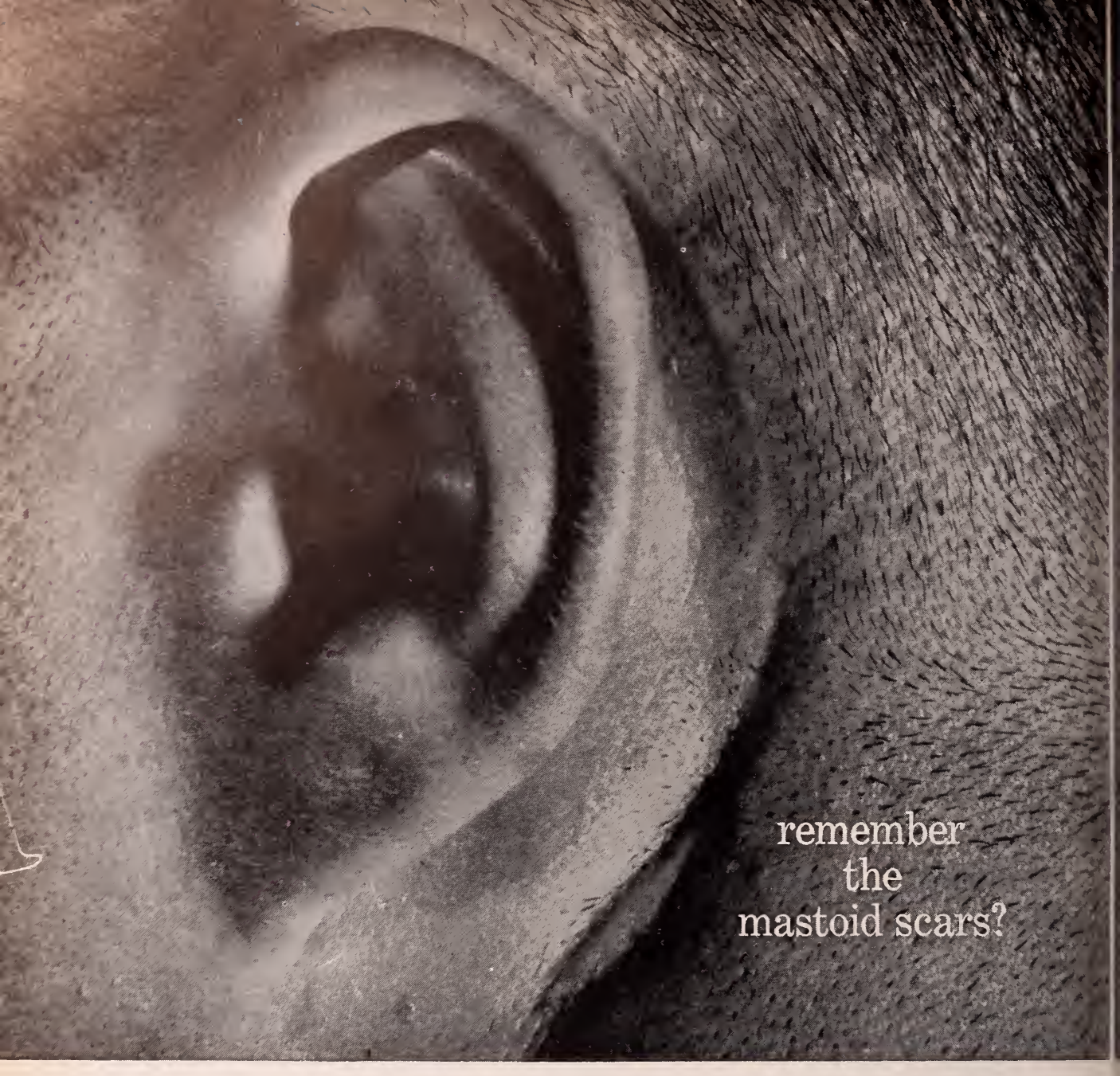
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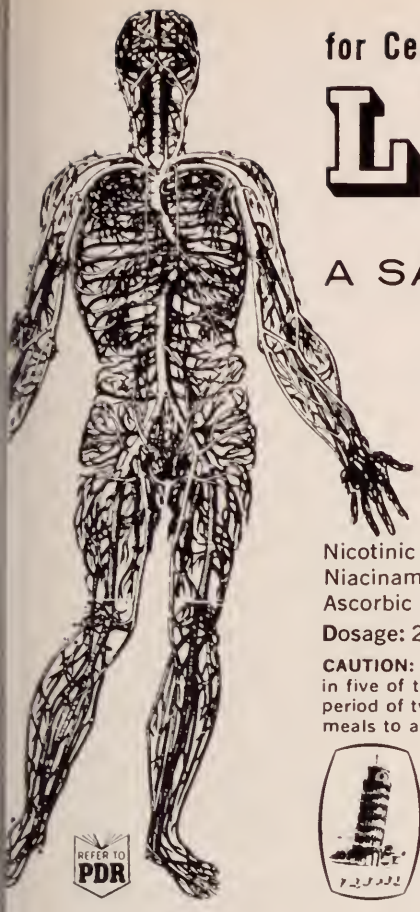
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*Asherson, N., "Acute Otitis and Mastoiditis in General Practice," H. K. Lewis & Co., Ltd., London, 1934.

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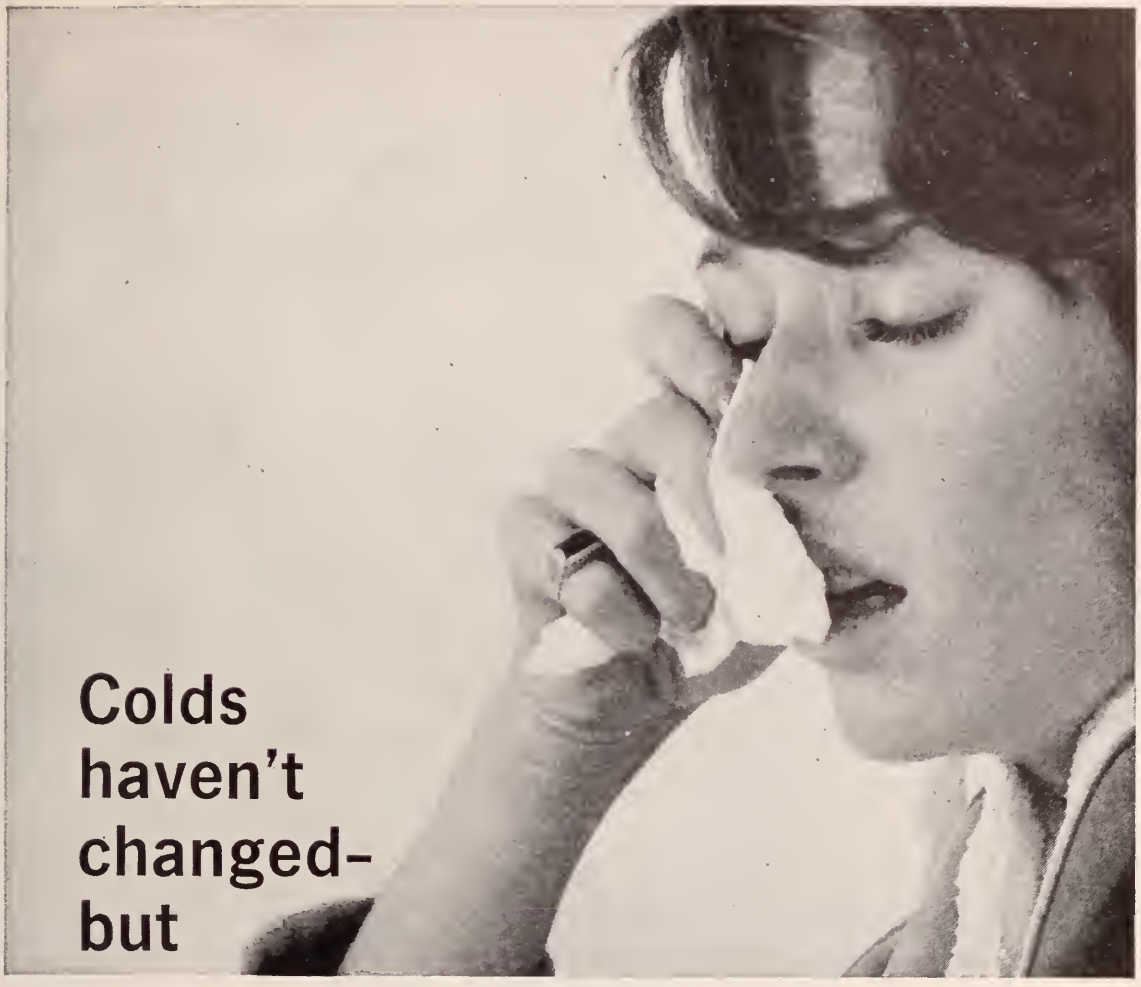
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*Levin, S. J.: **Pediat. Clin. North America** 1:975, Nov., 1954.

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1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

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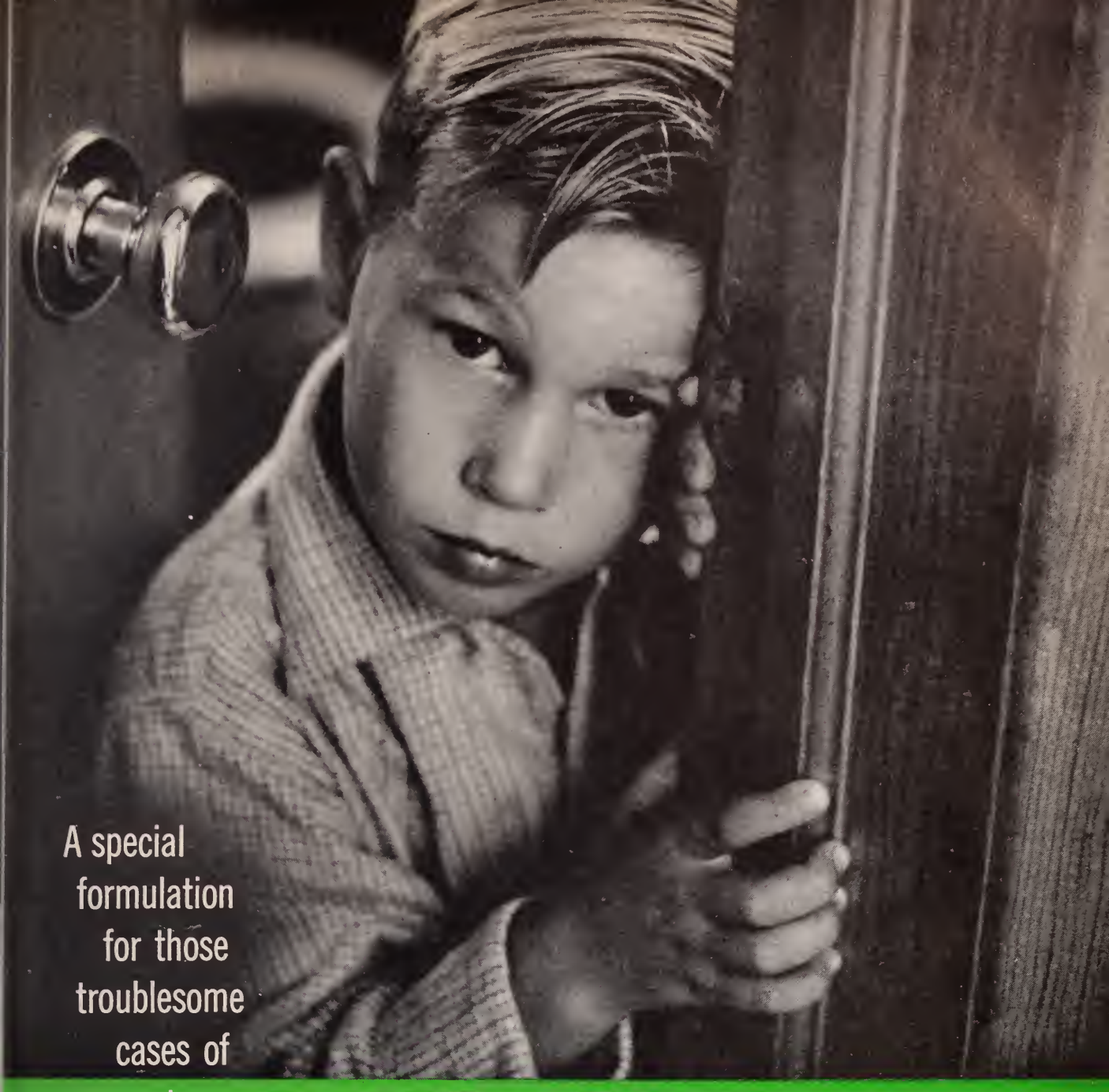


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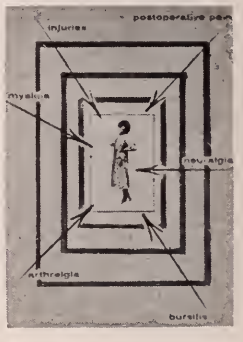
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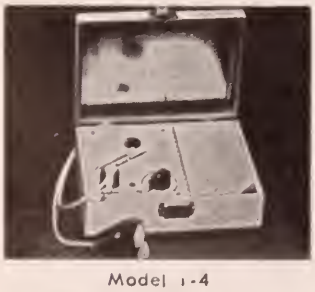
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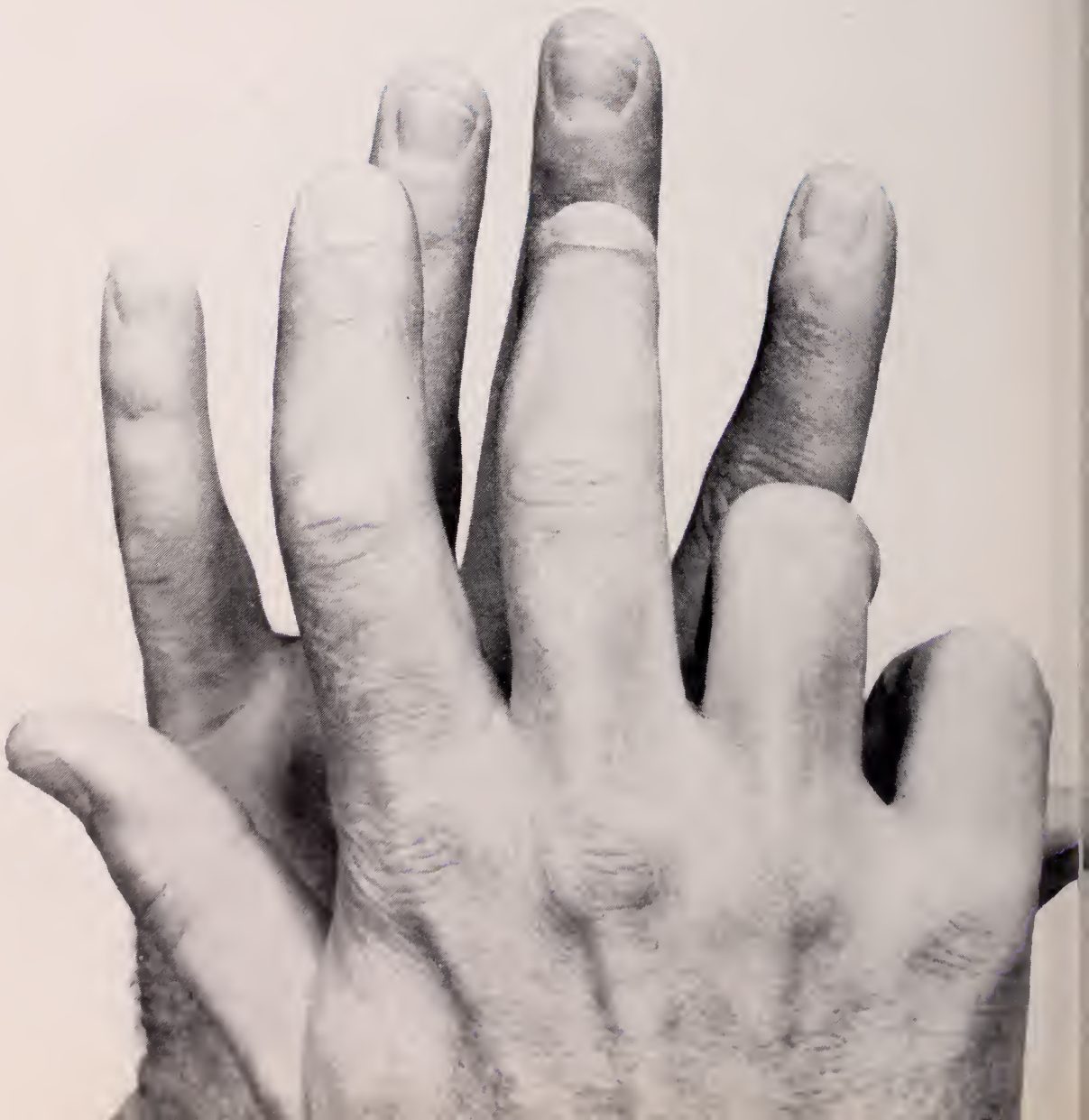
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References: (1) Thacher, H. C., & Fishman, L.: *J. Maine M. A.* **52**:84, 1961. (2) Hopkins, E. W.: *Postgrad. Med.* **29**:451, 1961. (3) Hall, W. H.: *M. Clin. North America* **43**:191, 1959. (4) Krugman, S.: *Pediat. Clin. North America* **8**:1199, 1961. (5) Ede, S.; Davis, G. M., & Holmes, F. H.: *J.A.M.A.* **170**:638, 1959. (6) Wolfsohn, A. W.: *Connecticut Med.* **22**:769, 1958. (7) Calvy, G. L.: *New England J. Med.* **259**:532, 1958. (8) Hendren, W. H., III, & Haggerty, R. J.: *J.A.M.A.* **168**:6, 1958. (9) Cutts, M.: *Rhode Island M. J.* **43**:388, 1960. (10) Berman, W. E., & Holtzman, A. E.: *California Med.* **92**:339, 1960. (11) Vetto, R. R.: *J.A.M.A.* **173**:990, 1960. (12) Sia, C. C. J., & Brainard, S. C.: *Hawaii M. J.* **17**:339, 1958. (13) Rosenthal, I. M.: *GP* **17**:77 (March) 1958. (14) Gaisford, W.: *Brit. M. J.* **1**:230, 1959.

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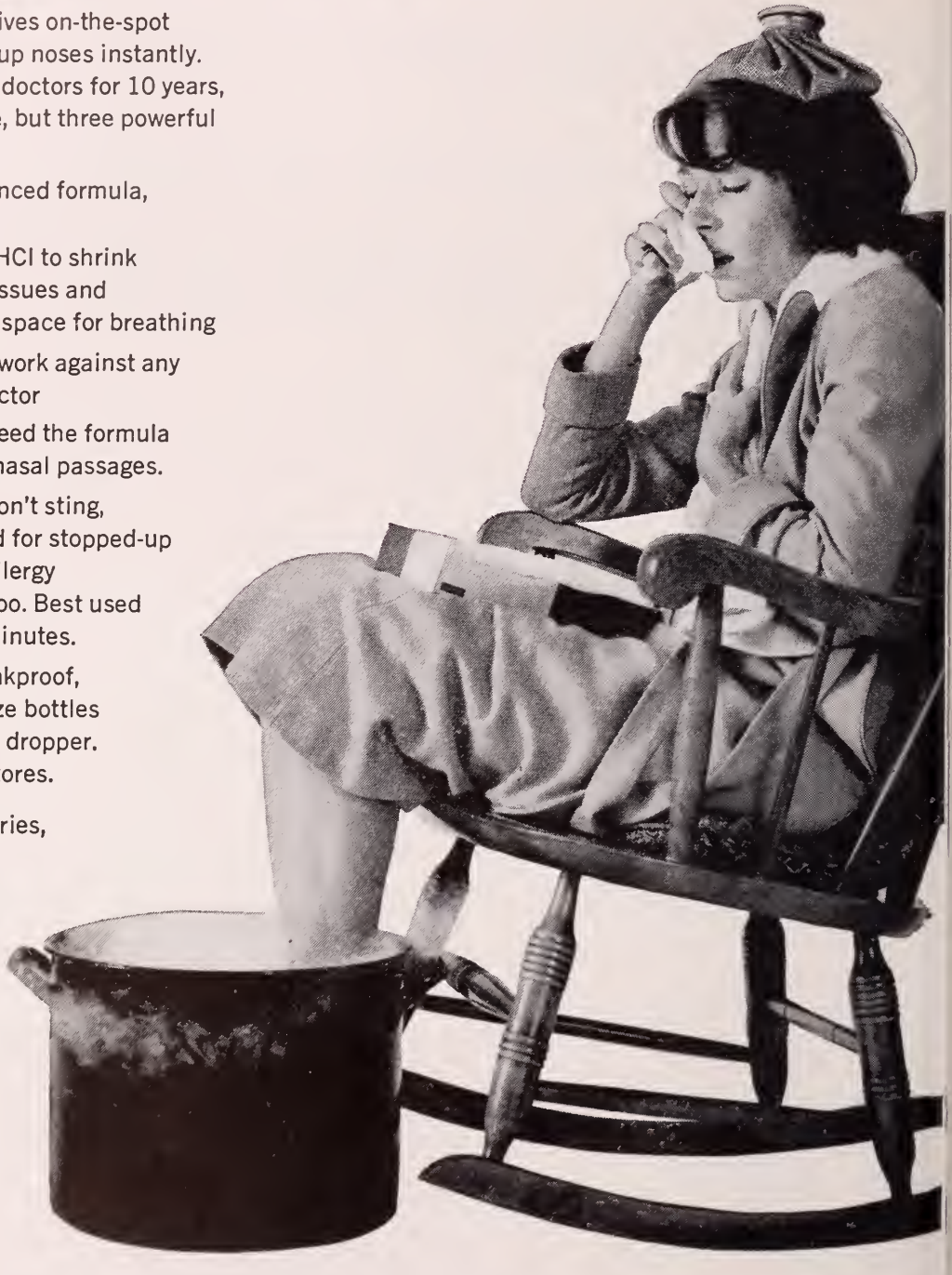
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Volume XLIX, Number 8, February 1963

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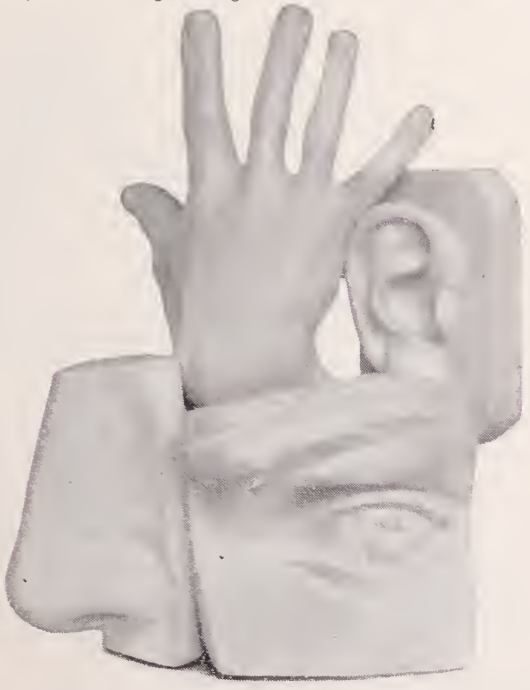
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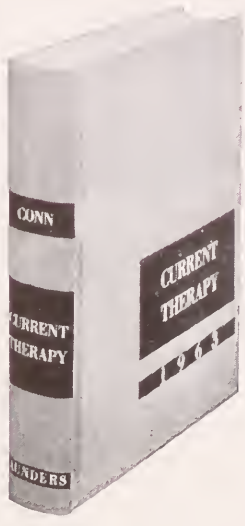
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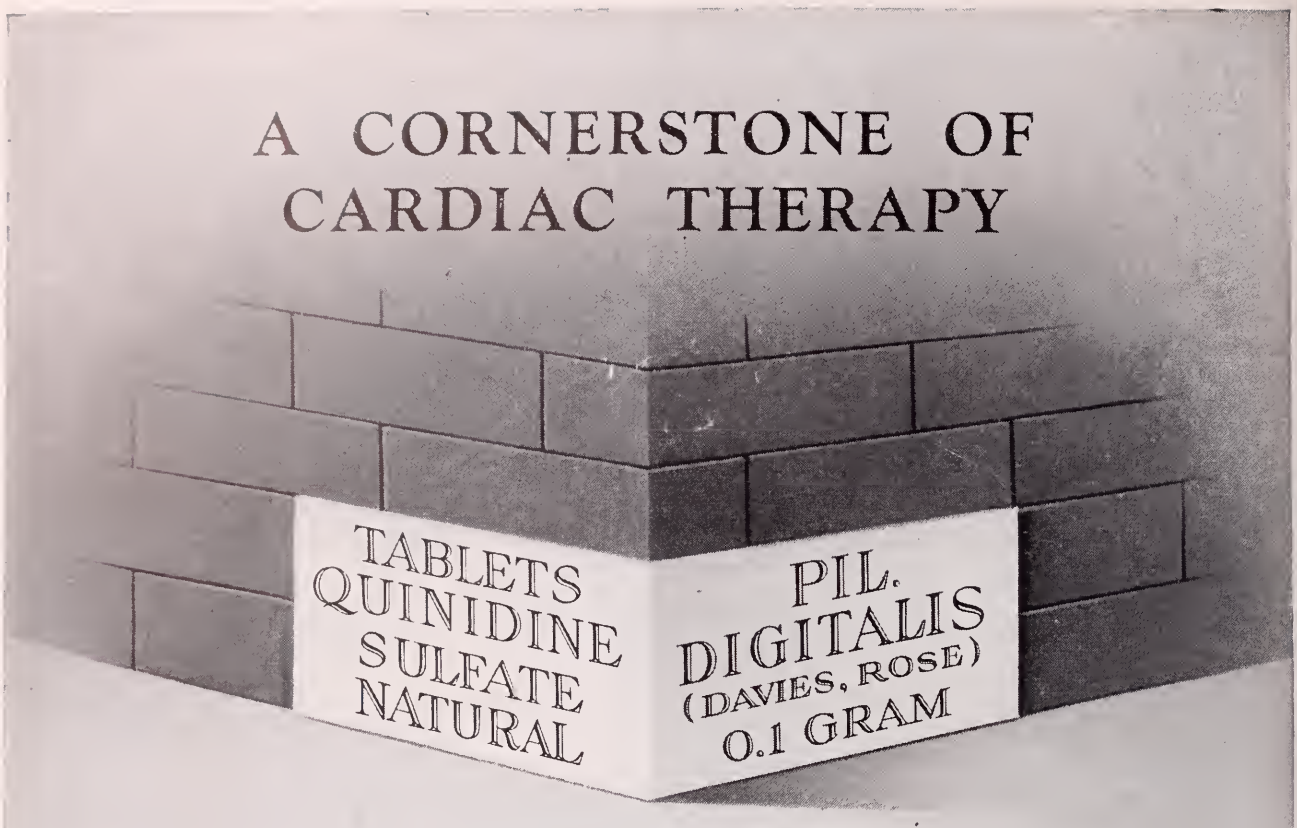
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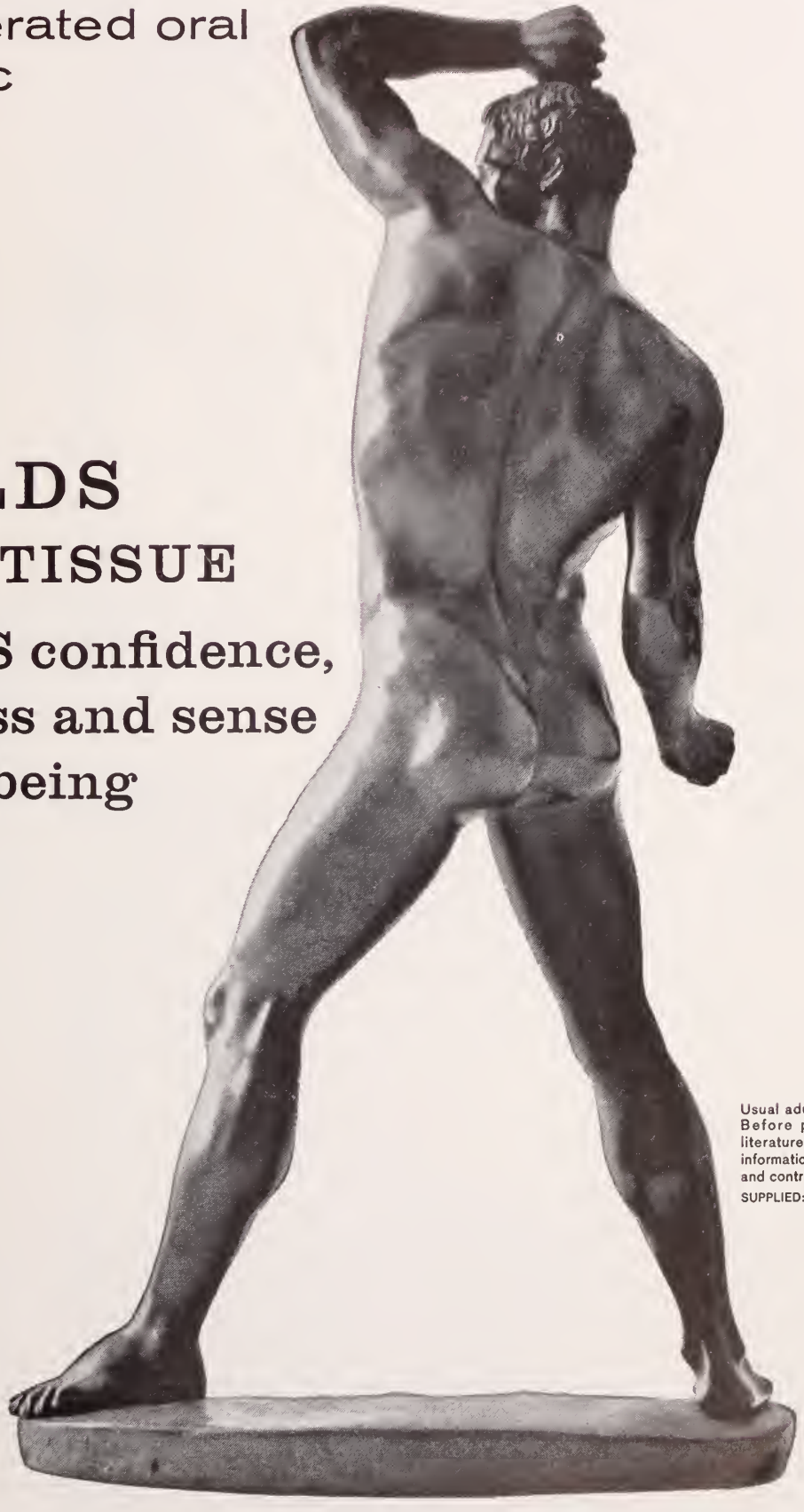
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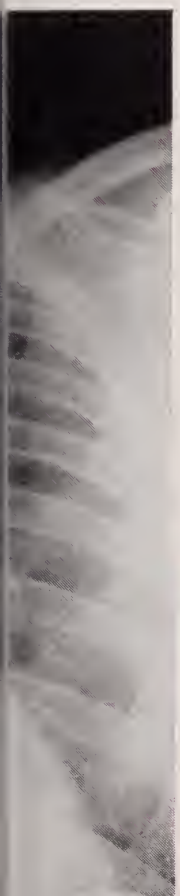
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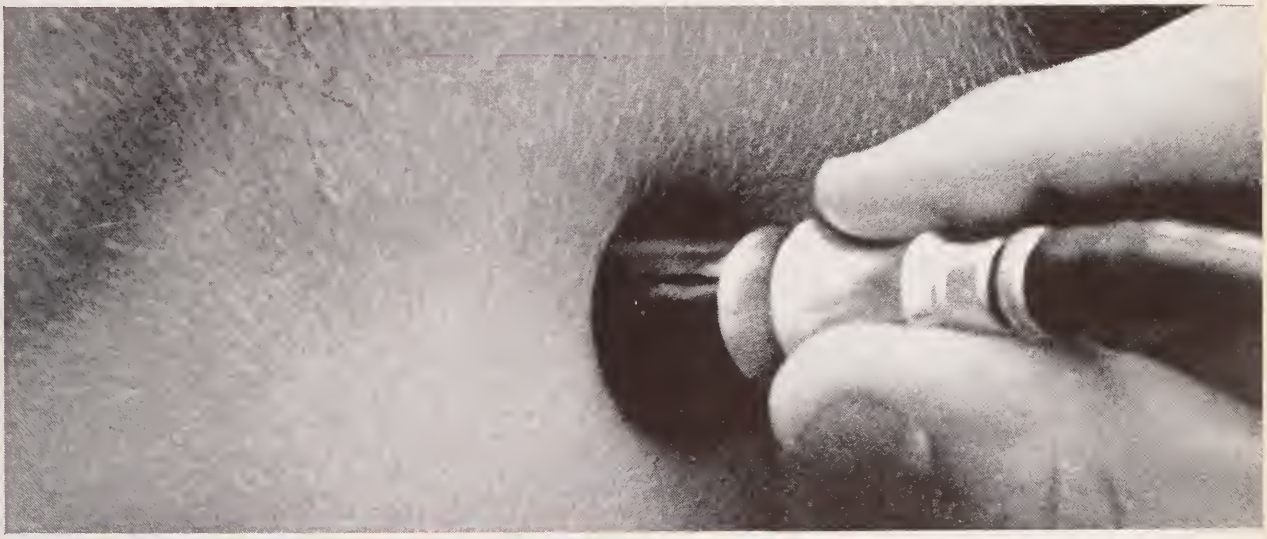
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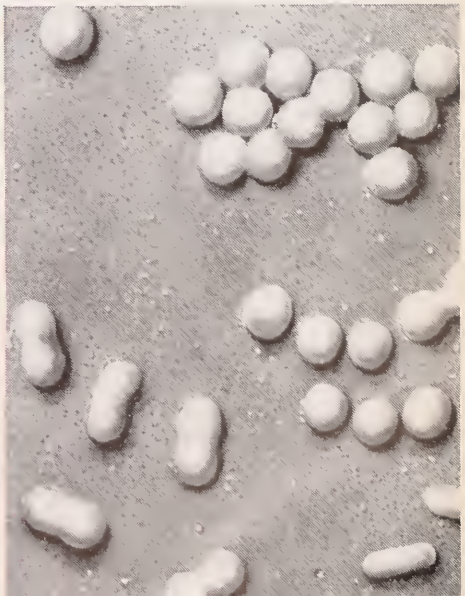
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The JOURNAL
of the Florida Medical Association

The February Issue

A PREFACE

This issue of The Journal is a special number for in it are featured scientific articles and editorials prepared by various members of the Brevard County Medical Society. The project was begun early last year and now, almost one year later, the issue is presented as evidence that, in spite of varied problems of practice, the physician seldom loses the desire to share his knowledge with his colleagues.

Within a short time, Brevard County became the focal point of the entire world, and the normal pace of the practice of medicine by the physicians there was immensely accelerated by the surge of population even before the first man was ready for his ride into space. The problems inherent in the influx of people are numerous, and the manner in which they are being solved by the members of the Brevard County Medical Society is commendable.

We are certain that Dr. Adrian R. Jensen was not aware of the additional problems he was assuming when he agreed to serve as the guest editor for this issue. His was the task to obtain authors for papers and editorials among physicians whose days and nights already were filled. His, also, was the responsibility after the articles had been completed to screen them carefully so that they would be of interest to his colleagues not only in the immediate area but throughout the state.

This, then, is the first issue of The Journal ever to feature the work of members of only one component county medical society. Brevard County was selected to open the way as this choice seemed most appropriate because of its place in history. To the authors who have cooperated to make the issue possible, we extend cordial appreciation, and to Dr. Jensen a hearty "Thank You." We have enjoyed the association. To other county medical societies, we offer this issue as a challenge to the scientific interest and editorial ability of their membership.

T. M.

The Doctor's Responsibility in a Boom Area

Industrial Medicine

Laurent P. LaRoche, M.D.
COCOA BEACH

Nearly every aspect of the economy of Brevard County has been significantly affected by the tremendous increase in population over the past 12 years. There has been a rapid transition from a citrus and a tourist economy to an industrial economy. The main reason for these changes is the vast missile testing complex of Cape Canaveral. In 1950, the county had a population of 23,000. In 1962, the population is conservatively estimated to be over 120,000, nor does there appear to be any diminution in its growth. With the coming of the manned Lunar Launch Facility of NASA to Brevard County, it is anticipated that the influx of new permanent employees with their families, directly concerned with the missile industry and in direct support of it, will increase the population to 250,000 by 1970.

At present, there are 66 firms in the missile business with a capital investment of 813 million dollars and an annual payroll of 136 million. The missile employees are, for the most part, skilled. They are recent arrivals from the industrial Southern California and the urban East. Most of them belong to some type of craft union and have for a number of years. They bring a new way of life to the community just as the community represents a sharp difference to their established family culture groups.

Physician's Diversified Role

What about the doctors, the practice of medicine, and the hospitals in this changing scene? In 1950, there were less than 20 doctors in the county and only two specialists; now there are over 100, with all major specialties represented, except neurosurgery. Two new hospitals have been built, and the original two are presently tripling their bed capacities.

Obviously, the impact of such industry has required the physician to assume new roles, meet new challenges. There must be an increasing awareness of the background conditions of the newly arrived working force. What are their stresses, both at work and at home, as the workers attempt to adapt satisfactorily to a new community? Many of the doctors in the area have cared for the workmen injured on the job as part of their general practice, and even those perceptive enough to recognize disease or accidents peculiar to work exposure have not considered themselves practicing industrial medicine. Nevertheless, the fact remains that more and more of their fees are paid either by Workmen's Compensation or by some company health insurance. In addition, the practice of most major companies of paying regular wages when an employee is off work with a personal illness has introduced new socioeconomic factors. Not infrequently, in considering a health problem, the physician has concerned himself with the medical aspects only, while the company, particularly the financial managers, have been concerned with cost and production factors. Such divergent consideration will inevitably cause conflict, and bring the third party even more into the once sacred doctor/patient relationship. In one sense, therefore, the medical doctor has become a part of industrial health programs by forces beyond his control.

The practice of occupational medicine, either full or part time, is no longer simply a matter of treating the casualties resulting from their work environment. Equal emphasis has to be expended in controlling or changing the working conditions to prevent injury or disease, and even this falls short of a properly oriented health goal. It is a well known fact, but oftentimes disregarded, that a worker does not check work-induced complaints at the time clock when he leaves the job for the day, nor does he leave his personal or family medical problems at the work gate when he enters in the morning.

Medical Director, Pan American World Airways, Inc., Guided Missile Range Division, Patrick Air Force Base, Florida.

Management's Concern

Throughout the country, true in the State of Florida, and still true in Brevard County, the largest numbers of workers are employed in small industries, such small concerns being generally limited to less than 500 employees. In Brevard County, many of the giant missile corporations are present, but here they are field units. None of them have full time physicians, nor could they afford them; so they must depend on local doctors for their health services, services which are often compared with what is available at the home plant. In order for this comparison to be satisfactory, a certain amount of preventive medicine is a must; but this cannot be provided unless one is familiar with the plant environment, its policies and its leaders. Industrial medicine cannot be competently practiced from a physician's office. The physician must be familiar with the plant and ready to accept the responsibilities required of a member of the management team, or, as a consequence, health decisions will be made by someone who is far less qualified in Safety or Industrial Relations. Management pays close to two billion dollars yearly for health. This is a considerable burden; so is there any wonder management has become increasingly interested in the medical care its employees receive?

Labor's Goal—Comprehensive Care

As mentioned before, in Brevard County most of the employees are covered by labor unions. In 1949, the courts ruled that the so-called fringe benefits were subject to negotiation between the employer and employees; therefore, labor, like management, has a great stake in employee health. Labor's goal, quite simply, is comprehensive medical care on a prepaid basis for every worker and his family. Comprehension to labor means prevention of illness, care and relief of sickness, and last, rehabilitation from the illness or injury to preserve the worker's earning ability. Considerable education is needed by the labor groups to achieve this goal without destroying the very quality of medical care they seek.

Mr. George Meany, President of the AFL-CIO, has said, "A medical care program that begins to operate only when the patient is flat on his back in the hospital is a program of poor quality, yet this is the only kind the medical societies and hospital associations have on their own volition offered to the public."

The labor movement has a long history in helping the advancement of the nation's life expectancy. Child labor law, restrictions on women's labor, and healthful working conditions are some of its undisputed contributions. It cannot be expected to do less now. Regardless of the quality or how complete "in-house" medical care is, it can have only limited success if the nonoccupational medical care for the worker and his family is not complete, and "complete" has the same three ingredients in the same proportion as occupational medicine—prevention, treatment and rehabilitation.

All practitioners, particularly those practicing part occupational medicine, must be prepared to assume a position of teacher and confidant for all three—employer, employee and union. There will be occasions of disagreement, but the doctor's advice and decisions, when based on knowledge of the dispute and executed fairly and objectively, will be respected, and third party participation will become less difficult and less encroaching. Actually, medicine has no choice—physicians either become the leaders in health matters, or they become the servants.

Cape Canaveral Medical Facility

At Cape Canaveral, Pan American World Airways has the contract with the Air Force to operate the Atlantic Missile Range, and part of its duties are medical. At the Cape, a rather isolated testing center, we have and must give comprehensive medical care. We are the only medical facility for some 11,000 workers. We have nine doctors who are all serving full time. We have a department of almost 100. All industrial medical disciplines are covered. Our patient load is heavy. Over 100,000 visits a year are made to our dispensaries. A variety of conditions are seen, from headaches to amputations, from mosquito bites to toxic exposures. The extraordinary work environment, the daily exposures to hazardous physical and chemical agents in new and unique situations have compelled our Medical Department to study critically many areas of scientific technology which just a few years ago were unknown. Biomedical engineering and health physics are new disciplines which have become integral parts of industrial medicine. Industrial hygienists, sanitary engineers, health physicists, human factors engineers and industrial chemists have the tasks to detect, monitor and control many hazards such as fuel toxicities, radar microwave pulses and nuclear emissions.

Integration of Disciplines

Without question, there must be a realization and understanding of the different applications of medical science; however, the doctor retains command as it directly concerns the patient. Such command is no gift, nor received by default. He must earn it.

So it appears, whether one serves full time as we do, or part time, the problem is the same, and the solution is the same to varying degrees. Physicians in all practices must integrate the social and economic sciences into medicine.

P. O. Box 888.

Severe Extrapyramidal Seizure Following Ingestion of Two Milligrams of Trifluoperazine (Stelazine)

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Since the introduction of chlorpromazine in 1951, many phenothiazine derivatives have been made available for use in various emotional disorders and as antiemetics. Shortly after the introduction of chlorpromazine, a group of toxic manifestations which were variously called extrapyramidal signs or seizures, neuromuscular reactions, and tetanus-like reactions were reported with increasing frequency.[1] They occurred with chlorpromazine, perphenazine, trifluprom azine, prochlorperazine, and trifluoperazine.[1-10] Although these toxic reactions have occasionally been reported following fairly small doses of a phenothiazine drug, they usually occur after treatment for 24 hours or more, and following moderately large doses of such a drug.[1,3,5,9] Trifluoperazine (Stelazine) apparently has not been a frequent cause of these toxic manifestations.[1] The case reported is unusual in that a review of the available literature disclosed no other case wherein a severe extrapyramidal type reaction occurred following a single dose of a phenothiazine drug.

Report of Case

The patient was a 32 year old white woman who had been seen on several occasions because of nervousness and anxiety. She had been treated with barbiturates and meprobamate, but had taken none of the phenothiazine drugs. Entering the office in an anxious and agitated state, she related that on the previous evening she had had a violent quarrel with her husband and had become, and remained, extremely upset. Although very anxious, she did not want an injection of any type. She stated at that time, and again later, that she had not taken any type of medication for more than two weeks. Trifluoperazine, 2 mg. three times a day, was prescribed. The patient stated later that upon leaving the office she immediately had the prescription filled and took the first tablet a few minutes later. About 45 minutes after taking the medicine, she noted an uneasy, "queer" feeling and some tightness about the jaws and neck. These symptoms were followed shortly by a feeling of undefined terror and impending doom. She then became rapidly prostrated and incapacitated because of generalized muscle rigidity and severe dizziness.

On arrival at the hospital, the patient was in a slightly opisthotonic position with rigid upper extremities. The tongue was protruding from the mouth and saliva was drooling. Slight cyanosis was present about the lips. The eyes were turned sharply upward in a fixed gaze, and the head was turned to the left. She was unable to speak, and her face was grotesquely contorted. Although she seemed well oriented, she was obviously terrified and was making frantic grunting and gasping sounds. There was no history of a convulsive disorder or anything to suggest a cerebrovascular problem. It was assumed that the reaction was due to the trifluoperazine, which, it was learned, had been taken by the patient. She was given 1 Gm. of intramuscular methocarbamol (Robaxin), and rapid disappearance of symptoms followed. She was asymptomatic in 45 minutes and experienced no recurrence of the symptoms.

Discussion

This case is primarily interesting because of the occurrence of severe dyskinetic muscular reactions following a single dose of trifluoperazine. Once this syndrome is suspected, it is usually promptly recognized and will respond to treatment with barbiturates, caffeine, or the drugs for parkinsonism such as procyclidine hydrochloride, benztropine methanesulfonate or trihexyphenidyl hydrochloride.[9] Some of these preparations are

not available as injections. Benztropine methanesulfonate, however, is prepared in an injectable form.[9]

In an attempt to classify the types of reaction to phenothiazine, Sarwer-Foner[5] grouped them into three major categories: (1) Parkinsonism or parkinsonism-like reactions are characterized by gait and posture abnormalities and include varying degrees of rigidity, tremor and salivation. In the mild forms, only a slight increase in muscle tonus and rigidity may be present. (2) The dyskinetic or dystonic syndromes are characterized by spasms or cramps which may be generalized or isolated to several muscle groups. Pain and spasm often occur in the upper part of the legs, in the arms and in the back of the neck. This group also includes the speech and swallowing difficulties, oculogyric spasms, tortion spasms, clonic and myoclonic spasms and twitches. (3) The excitomotor syndromes are a variation of the dyskinetic syndrome and are manifested by various facial grimaces, protrusion of the lips and tongue, and difficulty with mastication, speech and swallowing. Also, characterizing these syndromes are restlessness, agitation, and insomnia, which usually occur in the preparkinsonism phase.

These extrapyramidal reactions may take many forms, may be very mild or extremely severe and life-threatening, and may occur in all age groups. As this group of syndromes, once recognized, is easily treated, it should be remembered that any phenothiazine derivative may cause these reactions, even when administered in very small amounts.

Summary

A case is reported in which a severe extrapyramidal reaction was experienced by a 32 year old woman following ingestion of a single dose of trifluoperazine. Some of the features of this type of phenothiazine reaction are mentioned, as well as their treatment. It is pointed out that the phenothiazine drugs may cause varying types of extrapyramidal and excitomotor symptoms and that these reactions may occur following very small doses of a phenothiazine drug.

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Bullet Wound of the Abdominal Aorta With Survival

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Despite the great advances in vascular surgery in the past few years, there are few reports of survival from bullet wounds of the abdominal aorta. In 1960, Beall[1] reviewed the literature on this subject and found only two successful cases. Both were reported by Holzer.[2] Beall[1] reported 23 successful repairs of various kinds of penetrating aortic wounds of which three were bullet wounds of the abdominal aorta. Since then, Manlove, Quattlebaum, Flom and Lafave[3] and Bradham, Nunn and Brailsford[4] have added single successful cases to make a meager list of only seven successful repairs of abdominal aortic bullet wounds. Certainly there are other unreported successful repairs. It is not the purpose of this report merely to add another case to the literature, but to emphasize that wounds of this magnitude need not be considered hopeless. By having an efficient alert emergency room, a good blood bank and competent nurses and physicians, an appreciable percentage of these cases can be salvaged.

Report of Case

A 20 year old man received a 38-caliber bullet wound of the abdomen about 6 p.m. on July 26, 1961. The accident occurred approximately eight miles from Wuesthoff Memorial Hospital in Rockledge. An ambulance was immediately called and arrived within a few minutes. The ambulance driver alerted the hospital emergency room to the seriousness of the injury. The hospital then immediately notified the emergency room doctor on call and the laboratory technician. The patient arrived at the emergency room at 6:25 p.m., 25 minutes after the accident.

Physical examination revealed the patient to be in shock without an audible blood pressure. The pulse rate was 180, and respirations were 24. There was no response to stimuli. The skin was pale with a suggestion of cyanosis. The eyes were deviated, and the pupils were small and reacted sluggishly to light. The heart sounds were diminished and rapid. The lungs were clear. The abdomen was moderately rigid and distended. No peristalsis was heard. A bullet wound of entrance in the right upper quadrant of the abdomen was located about 1½ inches below the costal margin and 2 inches lateral to the midline. The wound of exit was 3 inches lateral to the midline, posteriorly, at the level of the first lumbar vertebra. It was readily apparent that the path of the bullet had to be in the vicinity of the aorta.

Blood was quickly drawn for cross match, and 500 cc. of dextran was given intravenously in one arm and 500 cc. of 5 per cent dextrose in saline in the other. An intravenous catheter was placed in an ankle vein. Then by the three intravenous routes, 1,500 cc. of blood was administered in a period of about 20 minutes. The blood pressure rose to 100/50 mm. Hg and the pulse rate decreased to 150. Fifty milligrams of Demerol and 4 mg. of atropine were administered. Operation was begun at 7:30 p.m. with intravenous Pentothal Sodium induction, followed with cyclopropane-oxygen mixture through an orotracheal tube. An upper midline abdominal incision was rapidly made with blood being administered both through an intravenous needle in an arm vein and a catheter in the ankle.

Upon opening the abdomen, several pints of bright red and clotted blood gushed forth from the peritoneal cavity. The blood pressure immediately dropped to zero. Arterial bleeding was first seen to be coming from the left lobe of the liver near the porta hepatis. After the liver was quickly packed, the main bleeding was located deep in the region of the pancreas. To expose this area, the gastrohepatic ligament was divided. It was then possible to compress digitally an opening seen in the aorta. Within a few minutes, the blood pressure again became obtainable.

The heart beat was monitored with a cardioscope during the procedure. For about 20 minutes the anesthetist was unable to obtain a blood pressure or pulse. The cardioscope, however, showed the heart rate at 150 to 170 per minute.

Digital pressure was kept on the aortic bullet hole until the patient had received enough blood for his condition to become stabilized. The hole was located between the celiac and the superior mesenteric arteries. It was a tangential left anterolateral hole measuring about 5 mm. in diameter. The stomach was transected through the antrum to obtain better visualization. It did not seem possible to free the aorta enough to place clamps in this area; so the incision was extended across the left costal margin converting it into an abdominothoracic incision. The lower end of the thoracic aorta was mobilized enough to pass a tape around it. The aorta was then temporarily occluded for about 10 minutes allowing closure of the abdominal aortic hole with several 4-0 silk sutures.

Attention was then directed to the liver wound. The packing was removed. Bleeding was coming from a branch of the left hepatic artery. This was sutured with continuous chromic catgut. The transected stomach was anastomosed. The chest and abdomen were closed in a routine manner with a chest catheter and two abdominal Penrose drains left in place. The patient received three pints of blood prior to operation and 18 pints during the four hour operation for a total of 21 pints. Calcium was given after each three pints of blood. At the end of the operation, the blood pressure was 120/84 mm. Hg, and the pulse rate was 90. The pupils were dilated and did not react. It appeared that he had suffered brain damage from the periods of hypotension. One hour later, however, the pupils contracted and he began responding. The first day the urine was grossly bloody. Fortunately, he passed an adequate output of urine which consisted of 860 cc. the first 24 hours and 2,300 cc. the second. The hematuria promptly subsided.

The postoperative course was complicated by gastric retention and vomiting, beginning two weeks following the operation. Apparently this complication was a result of the transection of the antrum of the stomach producing a postvagotomy gastric retention problem. The vomiting was corrected with a Finney pyloroplasty performed 27 days postoperatively on August 22. This patient has now been followed for over one year and shows no evidence of central nervous system, renal, or vascular disease.

Discussion

It is a natural tendency of a physician when confronted with a wound of this magnitude to have a feeling of hopelessness and to consider it a fatal injury. He may be tempted to make only a token attempt at treatment. By teamwork and prompt aggressive action, however, an appreciable salvage rate can be expected. At the Jefferson Davis Hospital in Houston, Texas, Beall[1] reported on 23 patients with penetrating wounds of the aorta who were subjected to operation. Ten (43.5 per cent) survived operation and seven (30.5 per cent) were long term survivals. With a survival rate of this degree, it is mandatory to make an all-out effort to save patients with this type of injury.

Treatment begins at the scene of the accident. Good first aid with treatment of shock and attention to an adequate airway if the patient is unconscious is essential. The ambulance should be equipped with a two way radio so that the driver can alert the hospital to the seriousness of the case to avoid lost time. Every hospital today, no matter how small, must have a good blood bank with competent technicians. Although Wuesthoff Memorial Hospital was only a small hospital with 60 beds at the time of the accident, the laboratory technicians were able to have three pints of blood ready 20 minutes after the patient arrived at the emergency room and a total of 21 pints was given in a period of five hours. The emergency room doctor should immediately begin the rapid infusion of plasma expanders until blood is available. An intravenous catheter is essential. If an injury to the inferior vena cava is suspected, the catheter should not be placed in the lower extremities because the blood may be lost into the peritoneal cavity through the caval tear and not reach the heart.

The operation should be started as soon as the patient is out of shock. Procrastination in the face of massive internal bleeding will only result in pumping in greater quantities of blood with further complications and eventual irreversible shock. The abdomen should be opened through a large easily made incision, such as a midline abdominal incision. The surgeon should be aware that there may be circulatory collapse when the blood under tension in the peritoneal cavity is released as the abdomen is opened. He should instruct the anesthetist and circulating nurse to be ready to pump in blood at that time. The site of bleeding must be found as quickly as possible and controlled with digital pressure until the condition of the patient stabilizes. Then the surgeon can plan how to repair the defect.

Moore, Nyhus, Kanar and Harkins[5] showed experimentally that the damage to the vessel goes at least 3 mm. beyond the edge of the hole, and they recommended excision of a segment of the vessel with end to end anastomosis. This procedure often is not possible, however, and simple closure is all that can be done. In this patient, the hole was between the celiac and superior mesenteric arteries. The closure was made with several simple fine silk sutures. Even this could not be done until the aorta was controlled above by entering the chest. Compressing the thoracic aorta slowed the bleeding enough to allow releasing the digital pressure and suturing the defect. This step is probably not necessary in other abdominal aortic injuries where the bleeding point is more accessible.

Summary

A successful repair of a 38-caliber bullet wound of the abdominal aorta is reported. It is emphasized that cases of this type should not be considered hopeless. Through teamwork and prompt aggressive treatment, an appreciable number can be salvaged.

The author wishes to thank Drs. Frederick H. Lucas and Bernard H. McLaughlin for their assistance at the first operation, Dr. Laurette M. Bryan for her assistance at the second operation, and Mrs. Adele Davidson for her excellent blood bank management.

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Myocardial Infarction Associated with Twin Pregnancy

Report of Case and Review of Literature

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Maternal death due to coronary artery disease is relatively infrequent with an incidence of 1.7 per cent.[1] When Gordon[1] reviewed all maternal deaths in Brooklyn from 1937 to 1952, he found 176 deaths were due to heart disease during pregnancy, 82.4 per cent to rheumatic heart disease, 3.4 per cent to congenital heart disease, 8.5 per cent to hypertensive heart disease and 1.7 per cent to coronary artery disease. Probably a great many more cases occur which remain undetected because the apparent mortality of myocardial infarction when it occurs with pregnancy is relatively low.

Prior to this report we were unable to find a single report of acute myocardial infarction occurring during a twin pregnancy. We present one case together with a review of the literature of this interesting complication occurring in women of childbearing age. This complication is particularly unusual since proved myocardial infarction in women under the age of 40 is rare (2.3 per cent) with only 11 per cent of known myocardial infarctions in women occurring under 50 years of age.[2] Since deAlvarez[3] has shown that a rise of total lipids and cholesterol occurs during normal human pregnancy, this relationship of myocardial infarction to total lipid rise in young women represents an interesting parallelism.

Report of Case

A 35 year old woman, gravida 10, para 7, abortus 2, was admitted to the hospital on June 8, 1959. She was seven months pregnant, the last menstrual period having occurred Nov. 15, 1958. She had experienced the sudden onset of severe crushing substernal chest pain radiating to the left shoulder and down the left arm, associated with some shortness of breath and followed by diaphoresis, nausea and vomiting. Chest pain approximately one year previously had been relieved by one injection with no known recurrence, and no history of previous heart disease or hypertension was elicited. She had had recurrent episodes of pyelitis and varicosities of both lower extremities for the last 12 years which had become progressively worse with each pregnancy. All seven children were living, and one had congenital heart disease.

On physical examination the pulse rate was 110 and the blood pressure was 104/80 mm. Hg. The patient was acutely ill, complaining of severe anterior chest discomfort and shortness of breath. She was very apprehensive and complained of deep substernal aching. The heart sounds were of fair quality, but the first sound was muffled in the left fourth and fifth interspace. No definite murmur or rub was heard. Severe bilateral varicosities of both lower extremities were present. Abdominal examination revealed a seventh month intrauterine pregnancy.

The laboratory findings on admission were white blood cells 8,800, hemoglobin estimation 8 Gm., hematocrit level 25 per cent and sedimentation rate 21 mm. per hour corrected. Urinalysis showed specific gravity 1.020, 1 plus albumin, 3 to 5 red cells, 10 to 15 white cells, and 2 to 3 coarsely granular casts. The following day, the serum transaminase level was 95 units (normal 8 to 40), the hematocrit level was 31 per cent, and the hemoglobin estimation was 10 Gm. The serum transaminase level on June 10 was 55 units. On June 17, the total cholesterol was 354 mg. per hundred milliliters, the protein-bound iodine 9.0 mcg., the white blood cell count 8,600, the hemoglobin estimation 12 Gm., the hematocrit level 37 per cent and the sedimentation rate 28 mg. per hour. The sedimentation rate on July 2 was 30 mm. per hour corrected, and the C-reactive protein test gave negative results.

Electrocardiographic findings are shown in figure 1. An electrocardiogram on June 8 showed the ST segment elevated in leads I, aVL, and V3 through V6, and depressed in leads III and aVF. Small Q waves were present in leads I and aVL with low R waves in V3 and V4. Interpretation was acute anterior myocardial injury. Three days later, evolutionary changes of acute anterior myocardial infarction were present with ST elevation in leads I, aVL, and V2 through V5, T wave inversion in leads I and aVL, and Q waves in leads I, aVL, and V3 through V4. On June 29, there appeared to be an extension of the myocardial damage since the previous tracing on June 11. The changes seen on this tracing were increased and appeared more exaggerated with more marked T wave inversion in leads I, aVL, and V2 through V6, and more marked ST segment elevation in leads I, aVL, and V2 through V5. On July 3, some resolution of the acute ST segment changes had occurred. The T wave changes remained. The impression was a subacute phase of anterior myocardial infarction.

The patient had an uncomplicated hospital course. At the time of this admission twin pregnancy was not suspected. She was sent home on July 4 for convalescence.

The patient was readmitted on August 12 for elective cesarean section. She had remained at bed rest at home, was well compensated and had been partially ambulatory immediately prior to this admission. A preoperative electrocardiogram showed the ST segment isoelectric, residual T wave inversion in leads aVL, and V1 through V4, and Q waves in lead V4 only, with a low R wave in leads V1 through V3. These findings were compatible with the chronic phase of anterior myocardial infarction. Examination at this time revealed the presence of twins, which was confirmed by several observers. After consultation, it was agreed to proceed with cesarean section followed by tubal ligation. The patient tolerated the procedure well, having received two pints of blood during the operation. The twins were viable and healthy. A postoperative tracing was essentially unchanged from the preoperative

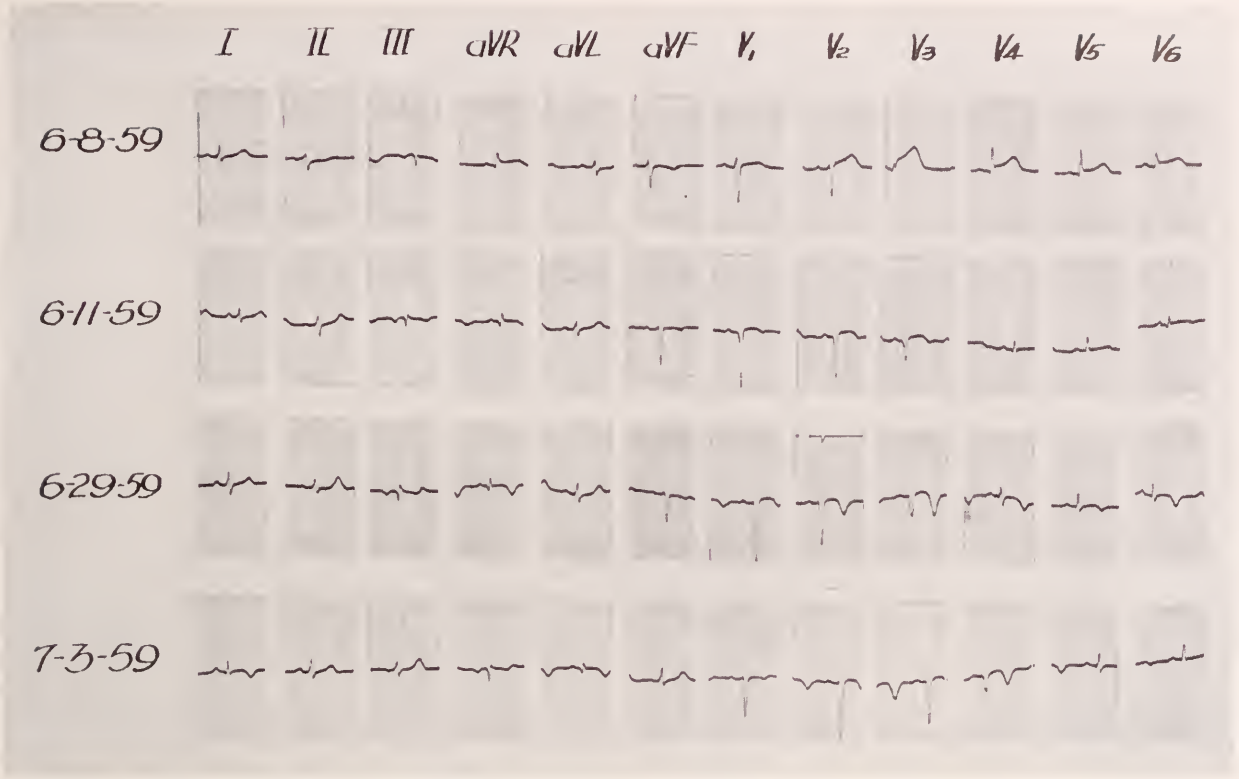


Fig. 1. — Electrocardiographic findings during the first period of hospitalization.

electrocardiogram. On August 15, mild localized phlebitis developed in the anterior medial portion of the right thigh which improved gradually with Varidase buccal tablets over the next 48 hour period. She was discharged on August 19 on a program of gradual ambulation over the period of the next two weeks.

Three weeks post partum the patient was readmitted to the hospital suffering from chest pain of acute onset. She was anxious and had complained of shortness of breath prior to admission. Routine laboratory studies at this time showed the fasting blood sugar to be 102 mg. per hundred milliliters. The sedimentation rate was 22 mm. per hour corrected, and over the next four day period no significant rise occurred. The serum transaminase level was 20 units on admission and rose to 86 units 24 hours later. The electrocardiogram failed to show further acute changes; the same changes compatible with the chronic phase of anterior myocardial infarction remained. The patient was treated with anticoagulants and bed rest for one week and discharged on September 3 to continue anticoagulant therapy at home. The electrocardiographic findings were the same in December. She now remains well and is caring for her nine children.

Review of Literature

In 1871, Spiegelberg[4] reported the original case of a woman with angina who had a normal delivery and survived. From 1871 to 1905 only six other cases of coronary artery disease during pregnancy were reported, and in all the patient was said to have had "angina," which proved fatal in only one case. These cases were not proved by electrocardiography or necropsy. At the time of his report in 1952 Mendelson[5] could find only 21 reported cases of coronary artery disease associated with pregnancy which appeared consistent with a diagnosis of myocardial infarction. In two of these 21 cases, myocardial infarction followed the pregnancy by periods of six and eleven months. In only four of the 21 cases was the diagnosis proved by electrocardiogram to be consistent with coronary occlusion. This author also added four cases of coronary artery disease in pregnancy, in only one of which myocardial infarction was actually confirmed by electrocardiographic evidence.

From 1952 to 1960, when a review of the literature was made by Watson, Emslie-Smith, Herring and Hill,[6] only 19 additional cases of myocardial infarction during pregnancy were reported including two of their own. In these cases 75 per cent of the patients survived. Eight of the survivors received anticoagulant therapy without ill effect even when administered immediately following delivery. Three cases were questionable. In one reported by Leff[7] in 1950 it was stated that the myocardial infarction occurred during the sixth month of gestation when it actually occurred six months following the pregnancy. In another case reported by Freedman and Gilbert[8] in 1956, the electrocardiogram showed T wave changes only occurring on the seventeenth postpartum day (T wave inversion in leads III, V4 and V5 with no QRS changes to confirm myocardial infarction). The third case, reported by Goldberger and Pokress[9] in 1950 has

electrocardiographic findings more compatible with cardiac decompensation than with acute myocardial infarction (left ventricular strain and digitalis effects). Since the report of Watson and his associates[6] in 1960, at least nine additional cases of myocardial infarction during pregnancy have been reported.[10-18]

In 11 of the 26 cases reported by Watson and his associates[6] hypertension was present, and in six cases the blood pressure values were unknown. In six cases, the myocardial infarction occurred during the first two months of gestation, in four at the fifth month, in four at term and in three in the puerperium. It occurred once in each of the other months of pregnancy. In only six of the entire group of 26 cases the onset occurred in the first three months of gestation. Two of the patients were diabetic and both of these were also hypertensive. Two of the four sudden deaths in this series occurred during labor, and these authors concluded cesarean section was the treatment of choice in cases of recently infarcted myocardium.

Age As It Relates to Myocardial Infarction

The ages of these patients varied from 17 to 45 years with the following age distribution in the 26 cases collected by Watson and his associates[6] and the nine more recently reported cases.[10-18]

Age in Years	Number of Cases
17 - 29	10
30 - 39	12
40 - 45	6
Unknown	7

There appears to be no correlation with age. One would suspect that the incidence of myocardial infarction might be much higher in the 40 to 45 year age group, but this is not the case.

Multiparity

Multiparity was present in 80 per cent of the patients in the reported cases of myocardial infarction during pregnancy or in the puerperium.

Hypertension

In over 50 per cent of all cases of myocardial infarction during pregnancy or in the puerperium reported in the literature the patients were hypertensive.

Electrocardiographic Changes

Brown[14] summarized electrocardiographic changes reported with pregnancy by Wallace, Katz, Langendorf and Buxbaum[19] and Meadows.[20] These are generally T wave inversion in leads I, III, aVF, CF2 and CF4 which may vary in latter weeks of pregnancy and return to normal after delivery. Some of these changes are probably explained by shifting of the position of the heart in the third trimester.

Drug Effects

Use of hypotensive drugs during labor and the puerperium may be an additional contributing factor. One of Brown's patients was treated with hydralazine during labor and delivery, and a myocardial infarction developed on the third postpartum day.[14] Urdan and Madden[11] also reported a similar history in a hypertensive patient treated with hydralazine intravenously during delivery who also had a myocardial infarction on the fourth postpartum day.

Blood Lipids with Pregnancy

Detailed studies of serum lipids in normal pregnancy have been made by deAlvarez.[3] The total lipids rise above normal in the latter half of pregnancy, usually beginning about the twenty-fourth week and reaching their peak at the thirty-seventh to the fortieth week, dropping back to normal again by the forty-sixth to forty-eighth week. At their peak they rise to 146 per cent of the normal control value. The serum cholesterol values and phospholipids also parallel this rise and return to normal during the same period.

Lipid studies have not generally been obtained in myocardial infarction during pregnancy. Cholesterol values given in reports are summarized:

	Month of Gestation	Cholesterol mg. %
Brock et al.[21]	Second	186
Brown[14]	Third postpartum day	217-260
Shapiro et al.[17]	Eighth	262-314
Present case	Seventh	354

Oliver and Boyd[22-24] studied various changes in the alpha and beta lipoprotein fractions related to sex and noted in normal pregnancy during the last trimester the serum cholesterol increases and the alpha and beta lipoproteins alter their distribution to resemble findings in men with ischemic heart disease, more cholesterol being attached to the beta lipoprotein fraction.

Serum Enzymes

Pre-eclampsia may raise the serum glutamic oxalacetic transaminase, but it is not significantly elevated in normal pregnancy.[25,26]

Discussion

In the study by Weinred, German and Rosenberg[2] of 219 women with proved myocardial in-

farction and known age, 52 per cent had hypertension, 53 per cent diabetes and 44 per cent an elevated cholesterol level. Only two women in the whole group failed to have one or more of the following: diabetes, hypertension, hypercholesterolemia, or a family history of diabetes, hypertension or coronary artery disease.

What may be said regarding "coronary-prone" female patients in the nonpregnant state can certainly be applied to the pregnant female who apparently is made more susceptible to coronary artery disease and myocardial infarction by pregnancy.

The epidemiology of coronary heart disease has been thoroughly studied[27-29] so that persons highly susceptible to coronary heart disease may be predicted. In pregnant females with any of the predisposing factors mentioned, more careful observation and medical management should be exercised during pregnancy because of the slight but definite increased risk with the circulatory load.

Summary

A case of myocardial infarction with a twin pregnancy and survival of the mother and twins is reported.

The literature is reviewed with only 32 well confirmed previous cases of myocardial infarction during pregnancy recorded. Twenty-five of these were reported in the last 10 years, and no previous case of myocardial infarction in a twin pregnancy is reported.

The relationship of blood lipids, age, multiparity, hypertension, diabetes and a family history of diabetes, hypertension or coronary artery disease to myocardial infarction in the pregnant female is discussed.

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Duodenal Obstruction From Anaphylactoid Syndrome

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Gastrointestinal manifestations of anaphylactoid syndrome (Henoch-Schönlein purpura) are well known. Abdominal pain, hematemesis and melena occur frequently and can usually be managed medically. The only surgical condition that has been reported with any degree of frequency is intussusception. Feldt and Stickler[1] reviewed the world literature on anaphylactoid syndrome and found 47 cases of intussusception, but mentioned no other type of abdominal surgical condition. The following case of a five year old boy with duodenal obstruction, apparently secondary to anaphylactoid syndrome, is therefore presented to illustrate an unusual complication of this condition.

Report of Case

A boy aged five years, was admitted to Wuesthoff Memorial Hospital in Rockledge on Sept. 12, 1962, because of severe abdominal pain of several hours' duration. The child had a history of attacks of abdominal pain, dating back to his first year of life. These attacks were severe enough to awaken him from sleep at night and cause him to cry out. Only rarely did vomiting occur with the pain, which would usually subside in a few hours. There was no disturbance in bowel function. He had been seen by several physicians over the years, and no definite cause for the pain had been suggested other than "nervous stomach."

One week prior to admission, the child had one of his attacks of abdominal pain and was brought to the emergency room of the hospital. He was examined by one of us and found to have diffuse abdominal tenderness with guarding. Although not definitely localized, tenderness seemed to be more severe in the right upper quadrant of the abdomen. He also complained of some pain in his left knee. The knee showed no definite swelling, heat or tenderness, but maximum flexion and extension produced discomfort. It was noticed on physical examination that there was some swelling of the skin and subcutaneous tissue overlying the right upper quadrant of the abdomen and over the right lumbar area. The palms of both hands had mild bluish discoloration which had the appearance of contusions. Laboratory studies revealed a white blood cell count of 8,650 with 62 per cent segmented cells and 38 per cent lymphocytes. The hemoglobin estimation was 13.2 Gm., and the platelet count was 160,000 per cubic milliliter. A sulfobromophthalein test revealed 3.7 per cent retention in 45 minutes. The sedimentation rate was 2 mm. per hour.

The next day edema developed on the forehead and over the left medial malleolus. Abdominal pain continued, but at this time it was more noticeable in the left lower quadrant. Edema next spread to the penis. The migrating patches of edema were believed to be on the basis of angioneurotic edema, and Aristocort was prescribed. Edema and pain subsided on this medication, and the patient felt well for the next three days. Severe generalized abdominal pain then developed, and he was admitted to the hospital. On the day of admission, he vomited material containing flecks of blood and passed two or three loose stools also containing flecks of blood.

The child had a history of occasional episodes of pruritic "red spots" scattered on various areas of his body. This skin condition, seen by one of us a month prior to his admission, was a roughened, macular red eruption suggestive of atopic eczema. The past history was otherwise unremarkable, except for an episode of diarrhea with dehydration at the age of six months.

Physical examination on admission to the hospital revealed a fairly well developed, well nourished five year old boy, having severe abdominal pain. The skin was clear at this time. The abdomen was moderately distended, and there was generalized tenderness. Bowel sounds were present. Physical examination otherwise gave negative results. The initial routine blood counts were essentially the same as one week before; the eosinophil count at that time was 0 and on admission now was only 1 per cent. Results of urinalysis were negative except for a few red blood cells.

Because of the abdominal pain and melena, intussusception was considered as a possible diagnosis. A barium enema showed no abnormality of the colon. The patient was observed in the hospital for a period of three days, during which time he continued to complain of generalized abdominal discomfort, which required intermittent narcotics for relief. He vomited almost everything taken by mouth. On the third day of hospitalization, a gastrointestinal x-ray series (fig. 1) showed the stomach moderately dilated and containing large amounts of solid food particles despite the fact that he had been fasting for 12 hours. The most striking finding was a narrowed second portion of the duodenum. There was no significant distention of the duodenum proximal to this narrowed area.

Because of the persistent abdominal pain and the duodenal obstruction, exploratory laparotomy was performed. At operation, multiple areas of purpura were observed scattered throughout the large and small intestine; some of them had coalesced to form large ecchymotic areas. In addition, there was a diffuse mesenteric adenitis of both the large and small intestine, the lymph glands varying between ½ and 1 cm. in size. A biopsy of one of the lymph glands was obtained, and the inflammation was later reported to be nonspecific. The cecum was mobile and the appendix normal. No malrotation of the colon was present. The stomach and upper portion of the duodenum were normal. The superior layer of the transverse mesocolon where it crossed over the second portion of the duodenum was thickened with edema. This peritoneal attachment of the transverse colon had shortened and tightened as a result of the edema, producing partial obstruction to the second portion of the duodenum. The attachment was divided, freeing the duodenum from compression. An incidental appendectomy was also performed. During anesthesia a few petechiae made their appearance on the eyelids and upper part of the cheeks. The following day, purpura developed over the extremities. The child was treated with Decadron.

The postoperative course was smooth. No further vomiting or melena occurred while Decadron was administered. An upper gastrointestinal x-ray series, repeated one week postoperatively (fig. 2), showed the duodenum

to be widely opened with no evidence of obstruction. The purpura subsided in about two weeks. Three weeks following the operation, attempts at discontinuing Decadron resulted in the reappearance of melena. At the time of this reporting, approximately six weeks postoperatively, the patient is asymptomatic while continuing to receive moderate doses of Decadron. Microscopically, however, some hematuria and albuminuria are evident. He is in the process of having an allergic workup in an attempt to find a possible etiologic agent.



Fig. 1. — Preoperative gastrointestinal x-ray showing obstruction of the second portion of the duodenum with gastric retention and dilatation.



Fig. 2. — Gastrointestinal x-ray taken one week postoperatively showing relief of duodenal obstruction.

Discussion

Anaphylactoid syndrome is a clinical condition characterized by arthralgia and abdominal pain. A skin rash appears from a few hours to one or two days later. Low grade fever and malaise are common. The skin rash begins as an urticarial wheal with the rapid development of a pink or red central punctum. It then progresses to purpura, and finally ecchymosis may occur. Many of the cases are mild. In the severe types, vomiting and melena occur. If the rash has not occurred and the arthralgia is mild or not present, appendicitis may be diagnosed and the child subjected to operation. At operation, the usual findings are edema, enlarged mesenteric nodes, and petechiae scattered throughout the intestine. In an occasional case, intussusception, with or without gangrene of the intestine, may be present. The most serious complication is generally considered to be renal involvement. Nelson[2] stated that about one half of the children have renal involvement which consists of albuminuria, microscopic hematuria, and sometimes cylindruria. Of those who have renal involvement, one half have azotemia or hypertension. The primary pathological lesion is an angiitis involving the capillaries and arterioles. This condition is similar to periarteritis nodosa, except that the latter condition affects the medium-sized arteries. There is usually marked edema and swelling of adjacent collagen fibrils.

Our case is certainly unusual in that the child exhibited migratory areas of edema on the body followed by the development of abdominal pain with vomiting. Because of the persistent vomiting, an upper gastrointestinal x-ray series was taken, revealing marked obstruction of the second portion of the duodenum. Our first thoughts were that this was a congenital defect that might be associated with malrotation of the colon, annular pancreas, or congenital stenosis. No proximal dilatation of the duodenal bulb, however, was present to suggest long-standing obstruction. We realized that the patient had patches of angioneurotic edema, but could not picture it localizing to the second portion of the duodenum. Three findings at operation were mesenteric adenitis, multiple petechiae of the large and small intestine, and a very prominent thickened, tight attachment of the transverse mesocolon across the second portion of the duodenum to the posterior peritoneal wall. This attachment was surgically divided to free the duodenum. Since there was no malrotation of the colon or previous history of significant vomiting or dilatation of the proximal duodenum, we assumed that this was not an abnormal band obstructing the duodenum, but a normal superior leaf of the transverse mesocolon that had become thickened and shortened as a result of this anaphylactoid syndrome.

The combination of surgical release of the superior leaf of the transverse mesocolon and the administration of Decadron was successful in relieving the duodenal obstruction and the gastrointestinal bleeding. The prognosis, however, remains guarded because of the hematuria and albuminuria. Feldt and Stickler[1] studied 139 patients with anaphylactoid purpura syndrome,

61 (44 per cent) of whom had had hematuria at least once during the course of their illness. Four of these children died from renal disease. Wedgewood and Klaus[3] studied 36 patients of whom 26 were followed from one to five years. Ten (38 per cent) had abnormal urine characterized by hematuria and cylindruria. Since none of these children had symptoms, their disease was classified as latent nephritis. These authors also suggested that the beta hemolytic streptococcus may be an etiologic factor since about one half of their patients had a preceding upper respiratory infection and five of nine throat cultures grew beta hemolytic streptococcus.

The use of corticosteroids in our case apparently controlled the gastrointestinal bleeding and purpura, but seemed to have no effect on the urinary findings. Feldt and Stickler[1] also had unimpressive results with corticosteroids. Eleven of their patients received corticosteroids with only three having good or excellent results.

Summary

A case of anaphylactoid syndrome is presented in which duodenal obstruction resulted from edema of the superior leaf of the transverse mesocolon.

Many of the common features of anaphylactoid syndrome, including renal complications, are brought out in this case.

In our case, similar to many in the literature, symptomatic improvement occurred with corticosteroid therapy, but urinary findings persisted.

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Cave Sedem

Beware the deadly sitting habit;
Or, if you sit, be like the rabbit,
Who keepeth ever on the jump
By springs concealed beneath his rump.

A little ginger 'neath the tail
Will for lack of brains avail;
Eschew the dull and slothful seat,
And move about with willing feet!

Man was not made to sit a-trance,
And press, and press, and press his pants;
But rather, with an open mind,
To circulate among his kind.

And so, my son, avoid the snare
Which lurks within a cushioned chair;
To run like hell, it has been found,
Both feet must be upon the ground.

Theodore MacManus

Reprinted from "And Gladly Teach," by Chester M. Jones, M.D., address in The Pharos of Alpha Omega Alpha 25:20 (July) 1962.

President's Page

In Time of Peril

At a regional A.M.A. conference which I once attended, the chairman told of an experience where he had been involved in negotiations between a large labor union and a large industry in which the final settlement hinged on fringe benefits; specifically, medical-surgical and hospitalization insurance. He stated that the union negotiator pounded his fist on the table and shouted, "I have 265,000 union members and they demand———— ———— ————." His reply was, in effect, "I have 265,000 doctors and I will have to ask each one of them what I can do."

In 1939, I heard the late Eduard Benes, prewar prime minister of Czechoslovakia, tell how the Nazis took over his country by misusing the very liberties which his countrymen valued most, those based on the American Bill of Rights. He indicated that his country had lost its freedom in part because its people had not learned that there is no freedom without responsibility, and because free men did not act to protect their freedom from its wanton abuse by its enemies. Fortunately we as Americans have learned to surrender some of our liberties in time of peril in order to preserve them for better times.

It strikes me that we as doctors are somewhat like the prewar Czechs. We pride ourselves that there is no better example of democracy at its best than in the organizational framework of the medical profession. The county medical society is the basic unit and its actions are subject to popular control. The state association is, in turn, controlled by the county medical societies and the national association by the states. Yet, the individuality of each doctor, of each society, and of each state association is preserved. No subordinate unit is bound, except morally, by the higher unit. We subscribe to the idea that the least government is the best government. When "organized medicine" was organized for professional edification only, government was largely unnecessary. Since the events of recent years have thrust the profession into areas involving economics, sociology, and politics, an effective system for concerted action becomes vitally necessary. In the early days of this country the confederate system of government, such as now exists within the medical profession, was tried and found wanting. In the Southern Confederacy, one of Mr. Davis' major problems was that he had to convince each governor of each state of the necessity of sending his militia for service in the national army, and oftentimes matters of critical importance were delayed awaiting decisions of 11 sovereign states.

I wonder how long we in times of crisis can continue to send into battle such unarmed warriors as the doctor who represented us in the labor negotiations. The time has long since arrived when we as individual doctors must take a more active interest in medical affairs at a local level and in the selection of the very best men in our societies to represent us in the House of Delegates. *Then we must empower them to commit us to policy or action which in their judgment is necessary.* Those doctors have the duty to select the most able of our members to serve in the A.M.A. House of Delegates. *Then they must empower them to commit us to policy or action which in their judgment is necessary.* Each of us must then wholeheartedly support the action taken. The experience of British doctors six years ago gave us a clear picture of what can happen when there is no unity. Where every faction has to be completely satisfied and each can be pitted against the other, everybody loses. If we are to preserve our individuality, we must be willing to surrender some of it in time of peril in order to present a strong, united front. The time of peril is now. Our survival depends upon our speaking with a loud clear voice, not 265,000 individual, divergent opinions.

Robert E. Fellner



Editorials

Our Patients Need to Know

In Brevard County, practicing general physicians see an unusual number of new patients. These people, mainly technical and construction workers and their families, have a large medical experience in dealing with physicians in all parts of this country and abroad. In talking with them one gets the impression that medicine has become standardized on a high plane of technical competence most everywhere that Americans obtain medical care, but that patients remain quite fuzzy in their understanding of what has happened to them medically and surgically. As an active practitioner who is frequently called upon to treat new patients in the emergency situation, I am frequently at a great disadvantage in not knowing definitely what type of previous surgery was performed on a new patient being seen for the first time for diagnosis of an acute condition of the abdomen. A new medical patient in acute congestive failure is an especially perplexing problem when it is not known whether he is fully digitalized or has been erratic in taking medication, or even whether digitalis has been given at all.

In the not too distant past it was considered good professional form to be rather authoritative and noncommittal in patient management. Busy doctors did not have time to give patients a short course in medicine, the population did not move about as much, and for the most part drugs were not as potent dose for dose as now. In the past few years precedent has been broken for all time. There is no subject that is taught as vigorously by press, magazine and television as the basic course, "How to Diagnose Your Own Illness and Initiate Early Treatment Before Calling the Doctor." Organized medicine and the various national health groups have done an excellent job in preparing authoritative lay information on nearly every medical subject. There seems little reason now to keep the physician from going one step further and making clear to his patients, who may not like to read medical articles or watch medical television, just what is wrong and what medications they are taking. This approach applies also to surgical patients. They should know clearly what has been done and why during their operation. If, for some reason, it is deemed detrimental or the patient is incompetent to keep up with his own medical history, then a responsible family member should certainly be able to give the new physician this information. One might ask why a doctor cannot pick up the phone and call the previous medical attendant for this information. Unfortunately, the patient who knows so little about himself is just as likely to have forgotten his previous medical attendant's name and possibly the hospital, too.

The doctrine of necessity for cooperation between diabetic patients and their physicians has necessarily made these patients in general well informed about their disease and its medications. Great strides have also been made in arthritis and such chronic diseases which by their very nature make the patient aware of his illness every day of his life. It is especially important for the patient with cardiovascular disease to understand thoroughly that the drugs he takes for heart disease are his principal form of life insurance and ought to be taken regularly until changed by his doctor. Too often the hypertensive workman comes to the physician when he is severely symptomatic, is given medication, feels better after taking one or two "treatments" (original prescription and refill), then drops out of sight until he returns with a complication. The same holds for the person who has been in failure, has been given an assortment of heart pills, and after a few months has gradually dropped one after another until he may be taking a single medication or none at all. If a

physician, unfamiliar with this patient's history, sees him in failure, again the additional hazard of digitalis toxicity must then be considered in the vigorous treatment of this patient. The anticancer drugs and anticoagulants offer a real danger for the patient who has been getting along well on medication, but tends now to be lax in coming in on a strictly regular basis for his blood test and follow-ups. If the attending physician does not keep an exact record and a follow-up on these patients, they may drag out dangerously the time of these rechecks. This kind of patient must be thoroughly indoctrinated and, probably, should bring in a responsible member of the family to keep track of him.

In summary, one must be aware that even in an enlightened community filled with highly educated people, most visits to the physician are of an emergency nature prompted by pain, fever, cough, difficulty in breathing, or some intense anxiety. Education directed to the average man by physicians in all modes of public communication is making the individual aware of prophylactic immunizations, regular health check-ups and reasons why money must be spent on medical research. The American family is now demanding and getting good care with acceptable regularity for the children and considerable "preventive maintenance" for the wife and mother (because the whole world revolves around her and she just cannot be sick), but the breadwinner and oldsters still commonly receive skimpy medical care. These persons, with depressing regularity seek medical aid during the acute or painful phase of illness; then if chronically ill, they will treat themselves unsupervised or break off medication completely until another crisis of the disease intervenes. This kind of patient calls for careful and time-consuming handling by the attending physician in order to educate him to the nature of his disease, the necessity of taking regularly even highly expensive medication, and remaining under supervision. In so doing we physicians can do some of our most satisfying and valuable work by keeping the working man on the job and prolonging the useful comfortable life of older people through making them educated members of their own health team.

Louis C. Jensen Jr., M.D.
Rockledge

A Fringe Benefit Hypothermia and Its Use in a Community Hospital

Recent advances in the very specialized fields of medicine have required intense work and development of new techniques and instruments. Members of the profession offer the results of their investigation with such proliferation that it is almost an impossibility for any practitioner to sift through this information and evaluate it so that it may be put to practical use in his community. Hypotherma is one such highly developed technique that should have wider application than it enjoys at present. Current literature abounds with articles on advanced techniques on extracorporeal perfusion with hypothermia. Little has been written, however, about the adaptability of the highly refined cooling blanket to more practical and common uses.

At the present time a number of efficient, versatile, and highly dependable hypothermia units are on the market. These units are now as small as oxygen tents and therefore can be utilized in the standard size hospital room. The temperatures of the controlling fluid can be controlled automatically to maintain a desired temperature of the patient within very narrow limits, or they can be controlled manually by adjusting the thermostat according to the temperature of the patient.

The blankets which accompany these units are of light weight vinyl plastic that may be easily handled and satisfactorily cleaned and disinfected following use. Some of the units are provided with extension legs to place the machine above the five foot level for use in the operating room, thus increasing their versatility.

Let us examine the advantages of this technique in one of the most common indications for its use—the hyperpyretic patient. Whether the eti-

ology of the soaring temperature is peritonitis, pneumonia, or other fulminating septic conditions, or central nervous system injury, the technique is the same. In cases of this type normothermic temperature is the goal, not hypothermic.

The hypothermic unit is rolled into the room and plugged into an electrical outlet. One cooling blanket is placed under and another placed over the patient and connected to the cooling unit. The fluid temperature of the coolant is set for 94 F. and the machine turned on. The temperature of the patient is monitored by a simple thermister probe inserted into the rectum. This procedure has required only two or three people no more than 15 minutes. From this point on the temperature control can be automatic or easily adjusted at intervals of 20 to 30 minutes to maintain the normothermic temperature. Should the temperature of the patient drift to 94 F., no harm has been done as this is a safe level. In fact, there is some evidence that this is beneficial.

Contrast this procedure to the chain of events that occurs when the order for alcohol sponge bath is carried out — the number of people continuously involved, the discomfort of the patient, the wide fluctuations in temperature, and the exhaustion of the team if it is required for more than several hours.

Once the hospital staff has used and become familiar with the advantages of such a method of combating hyperpraxia, the next logical step will be application of this technique to other less common conditions which respond well to this mode of therapy. Examples of other conditions are: thyroid storm or postoperative thyroid crisis, gastrointestinal bleeding in the elderly patient to help control bleeding, and as an adjunct to anesthesia in surgery on patients with chronic anoxia or cirrhosis. These examples require somewhat closer observation and therapy to reduce shivering, which is not difficult to control.

The development of the hypothermia units has offered an additional aid to good patient care with a minimal burden to the nursing service. The practical application of this mode of therapy in the community hospital represents a valuable fringe benefit of advanced research and development.

Curtis G. Wherry, M.D.
Titusville

The Coffee Break

A newly acquired American tradition manifesting itself today is the "Coffee Break." Americans are consuming well over one hundred billion cups of coffee a year, much higher than a 19 pound per capita consumption as of as recently as 1948.

An occasional break for relaxation and refreshment is now an accepted form of diversion, scientifically supported, which will help achieve improved productivity. Laboratory tests find mental and physical acuity decreases sharply at midmorning and midafternoon because of the monotony of employment. The time loss of the break is not unusually long and seems well compensated for by the subsequent increased productivity, so state the investigators. These scientific facts lend credence to employees' arguments for the necessity of the coffee break.

Many articles, however, have appeared in lay journals, magazines, and newspapers, explaining that this time-consuming habit prevents employees from accomplishing their daily tasks. From a simple "time and motion" study, methods are now being devised to decrease or at least regulate this ofttimes overly utilized lounging period. These include vending machines, catering services, cafeteria units, and "send somebody out" routines. One San Francisco insurance company manager has stated that the coffee break gradually grows from 10 minutes, which it should be, to 15, and then starts edging past. Some studies indicate that the worker prepares mentally for the break 10 minutes beforehand and recovers from it 15 minutes afterwards. Another source of excess intake now assuming huge proportions is that of the housewife and her frequent visiting companions.

Coffee intake also has medical implications, not only affecting daily routine, but changing one's psychic approach to life itself, with reference to the society and the family and also the deleterious effects brought about physiologically on the vital organs of the body itself. We know the average cup of coffee contains 100 to 150 mg. of caffeine. This in itself is a medicinal amount, pharmacologically speaking. Two cups of coffee,

a common coffee break ration, would, with the caffeine principle, afford one a therapeutic dose of a central nervous system stimulant. This stimulant creates another form of addiction, closely related to that associated with the excessive use of alcohol, nicotine, or the amphetamines. A comparative analogy might also reveal that all of these forms of addiction are commonly substituted for good dietary habits, and hence further debilitate the employees' total effectiveness.

Coffee is a xanthine derivative evoking therapeutic responses similar to those of theophylline and theobromine. They differ, however, in degrees of action on different tissues. The xanthines are considered:

1. Cerebral stimulants
2. Coronary vessel and bronchial dilators
3. Diuretics
4. Cardiac and respiratory stimulators

Of the xanthines, caffeine is the most potent central nervous system stimulant, while theophylline evokes its general action as a coronary dilator and theobromine as a diuretic.

Specific actions of caffeine related to everyday living are employed in the following:

1. Action on the Cerebral Cortex. — With larger doses, this action descends to the spinal cord, creating an increased degree of irritability, mental anxiety, at times insomnia, adverse muscular coordination, and subsequent sense of depression. With society moving ahead at such a rapid pace, and the problems faced daily generating hostilities and anxieties, add caffeine to the routine, and with this summation of products, one becomes irritable and quite intolerant. As husband and wife gulp coffee in lieu of breakfast, restimulate themselves at intervals all day, they are finally unable to rest properly at night and become difficult to live with and/or hardly acceptable in employee-employer relationships. The ramifications can extend from misunderstandings at work and spats at home to losing one's job and possibly divorce. Here is just another of the many facets of our daily life affected by the use of caffeine.

2. Actions on Respiration and Pulse.—Two cups of coffee increase oxygen consumption 10 to 15 per cent, depending upon susceptibility of the subject, through action on the medullary center. When coffee is coupled with tobacco, is one not also assimilating more nicotine during this period? This tends to give unrealistic blood pressure readings, pulse rate and other vital signs during preemployment and insurance physical examinations.

3. Alimentary Canal.—The action on the gastric mucosa has long been noted as a possible factor in causation of the gastric ulcer. This fact is utilized today to produce gastric flow in the test meal. We can cite the increasing incidence of peptic ulcers as probably indirectly, or possibly directly, related to overconsumption of caffeine. Also as a stimulus for bowel action, this in time signals the gastrocolic reflex which creates the urge to defecate. Because business is pressing following unusually long coffee breaks, one cannot respond; he puts off his normal action, and slowly through daily engorgement of the rectum, hemorrhoids develop.

Yes, we must accept and realize that the overutilization of this newly formed American habit, the coffee break, is becoming a growing problem among employers. For this reason today coffee breaks are frowned on by such large institutions as United States Steel, Republic Steel, and the Martin Company here at Cape Canaveral. The medical implications and ramifications can be many for all concerned, employee and employer. It seems most beneficial for us that we either dispense with completely or return to moderation in this habit of coffee breaks first introduced to American business by a custom utilized by the merchant seamen. So, the next time you pick up your cup and raise your little finger as etiquette demands, let it be a warning to you. Despite all the possibilities mentioned herein, one must also realize that hemorrhoids may be developing or that he may be tending toward divorce.

Joseph C. VonThron, M.D.
Cocoa Beach

Changing your address?
Please notify the Florida Medical Association, P. O. Box 2411,
Jacksonville 3, Fla.

Comment Clinical



Florida Academy of General Practice

The Thirteenth Annual Scientific Assembly of the Florida Academy of General Practice was held October 19-21, 1962 at the Deauville Hotel, Miami Beach. The format of the meeting consisted of four sessions of general clinical interest, each moderated by a member of the Academy.

The session on Arthritis in General Practice featured Dr. John H. Talbott, Editor of the Journal of the American Medical Association, who reviewed the "Diagnosis and Treatment of Gouty Arthritis" and maintained that most patients with gout can remain symptom-free with daily colchicine and probenecid treatment. Dr. Sterling H. Huntington of Coral Gables followed with a discourse on management of osteoarthritis in which he stressed the benefits of a graded exercise program. Dr. David S. Howell of the University of Miami School of Medicine then conducted a "slide clinic" illustrating the diagnosis and treatment of the various inflammatory arthritides. The session concluded with a question and answer period.

The afternoon session on Friday, October 19, was concerned with genitourinary disease. Dr. Jay P. Sanford of the University of Texas School of Medicine discussed "Inapparent Pyelonephritis," or as he prefers, "Obstructive Infectious Uropathy." He urged the use of chemotherapeutic agents indicated by the sensitivity of the infecting organism for a period of at least seven days. Dr. John D. Young, Professor of Urology at the University of Maryland School of Medicine, spoke on "Stubborn Urinary Tract Infections." He emphasized the need for eliminating obstructive conditions in the control of chronic disease of the urinary tract. Dr. Robert Glynn of Newark, N. J., presented the gynecological aspects and concluded alkaline solutions were preferred to acid solutions in vaginal douching as they are mucolytic and result in better cleansing of the vaginal mucosa. The session closed with a panel discussion and questions from the audience.

Dr. Robert B. Greenblatt, Professor of Endocrinology at the Medical College of Georgia, led the Saturday morning session on Thyroid Disturbances. He characterized the thyroid as the most important and most abused endocrine gland. He reviewed the diagnosis and treatment of insufficient thyroid hormone production. Dr. Banning G. Lary of Miami next presented "Surgical Conditions of the Thyroid Gland." Generally, thyroidectomy is reserved for patients under 40 years of age with goiter and those with nontoxic nodular enlargement. Malignant disease is present in 4 to 7 per cent of the latter group. Dr. Raymond E. Parks, Professor of Radiology at the University of Miami School of Medicine, concluded the session with a discussion of the role of iodine^{131} in thyroid disease. Radioactive iodine is most efficacious in the diagnosis and treatment of thyrotoxicosis. The greatest drawback is the development of hypothyroidism in a large percentage of patients. A number of questions were directed to the panelists.

The session on Pediatric Problems concluded the scientific program. Dr. Harry C. Shirkey, Director of Children's Hospital, Birmingham, Ala., spoke on "Respiratory Infections in Children" and enumerated the diagnostic clues in streptococcal infection. He thought penicillin was the drug of choice in this disease. He also stressed the need of emergency tracheotomy in Hemophilus influenzae epiglottitis. Dr. Stephen C. Wright of Miami then spoke on "Common Psychiatric Disorders of Childhood." He emphasized the role of the family physician in evaluating family imbalance and pointed out that both children and parents respond better to ventilation than advice. Dr. Victor H. Witten, of the Department of Dermatology of the University of Miami School of Medicine, spoke on "Skin Disorders in Children." He advocated a conservative approach to the treatment of hemangiomas, warts and nevi. The indications for removal were thoroughly reviewed. The session terminated after a question and answer period.

On Sunday, October 21, the general business meeting of the Florida Academy of General Practice was held with Dr. Franklin J. Evans of Coral Gables presiding. Featured speakers were Mr. Victor Hruska of the Florida Health Insurance Council and Mr. Arnold Geier, who presented a timely discourse on the Keogh-Smathers Bill.

Lynn P. Carmichael, M.D.
Miami

Association News



Report of Delegates American Medical Association 1962 Clinical Meeting

The Sixteenth Clinical Meeting of the American Medical Association, held in Los Angeles on November 25-28, 1962, was attended by 5,209 physicians. The final registration reached a total of 10,908. Health care for the aged, medical ethics, graduate medical education, expansion of the AMA Board of Trustees and a study of the sections and scientific program of the AMA were among the major subjects on which the House of Delegates took action.

Dr. George M. Fister of Ogden, Utah, AMA president, keynoted the attitude of the Association toward Social Security health care for the aged at the opening session of the House by declaring that there will be no compromise on fundamental principles and he urged the entire medical profession to understand the basic issues in this struggle so that they can recognize the difference between compromise and surrender. "The people will respond to the truth," he said, "and it is imperative that we as individuals and as an organization see that they get the truth."

The House reaffirmed, without compromise or change, the Association's present policy of opposition to the King-Anderson type of legislation and support for the Kerr-Mills program. In so doing, it also approved in principle four suggested amendments to the Kerr-Mills Law providing for: (1) removal of the requirement that both Old Age Assistance (OAA) and Medical Assistance for the Aged (MAA) programs be administered by the same agency; (2) flexibility in the administration of the income limitations proposed under state law so that a person who experiences a major illness may qualify for benefits if the expense of that illness, in effect, reduces his money income below the maximum provided; (3) a provision in the law requiring state administering agencies to seek expert advice from physicians or medical societies through medical advisory committees; and (4) "free choice" of hospital and doctor under state programs. At the same time, the House also endorsed in principle four proposed amendments to the Internal Revenue Code, designed to assist in financing the medical and hospital expenses of the aged. These amendments would: liberalize tax deductions for medical expenses of dependents over age 65; remove the 1 per cent drug limitation and include drugs as medical expenses; permit taxpayers over age 65 to receive full tax benefit for medical expenses by use of the carry-forward and carry-back principle, and provide a tax credit for medical expenses paid by the over age 65 taxpayer, proportionate to the relation between his medical expense and taxable income.

In considering seven so-called "pledge" resolutions, involving professional freedom, the House adopted a substitute resolution urging that all physicians be encouraged to support the position taken by the House of Delegates in June 1961. That policy statement said: "The House of Delegates believes that the medical profession will see to it that every person receives the best available medical care regardless of his ability to pay, and it further believes that the profession will render that care according to the system it believes is in the public interest and that it will not be a willing party to implementing any system which is detrimental to the public welfare."

The Judicial Council submitted a report containing new opinions on the medical ethics involved in physician ownership of drug stores, drug repackaging houses and drug companies, dispensing of glasses by ophthalmologists, and advertising practices of medical laboratories. The House decided that the first three should not be acted upon at this time, but approved the portion of the report relating to advertising practices of medical laboratories and agreed that the propriety of such practices should be determined at the local level in compliance with the new opinion. The House also approved the rules of procedure adopted by the Judicial Council for disciplinary action in cases where the Association now has original jurisdiction as conferred by the June 1962 change in the By-Laws.

A special report on the compensation of interns and residents was submitted to the House by the Council on Medical Education and Hospitals and the Council on Medical Service as information only, with a request for further study, comments and suggestions. The House urged that all delegates, hospital staffs and medical societies discuss the report and forward all suggestions to the two Councils in time to influence the form of the report to be presented for action at the June 1963 meeting. In another action on graduate medical education, the House approved a report on internships and hospital services in which the Council on Medical Education and Hospitals recommended numerous changes in the Essentials of an Approved Internship. It modified one Council recommendation to provide that at least 25 per cent of the total house staff (interns and residents) of a hospital should be graduates of accredited United States or Canadian medical schools. It also instructed the Council on Medical Education and Hospitals to exert every possible effort and influence so that all hospitals with approved house officer training programs accept a reasonable number of foreign medical school graduates.

The House, by a vote of 130 to 48, adopted changes in the Constitution and By-Laws which would have implemented the June 1962 recommendations of the Ad Hoc Committee on the Board of Trustees, including expansion of the Board from 11 to 15 members. The Judicial Council, however, later informed the House that the affirmative votes necessary to amend the Constitution should have totalled at least 144, or two thirds of the 216 voting delegates registered at the Wednesday session. The House then adopted a motion to vote on the proposed Constitutional amendments, in accord with the changes made in the By-Laws, at the opening session of the June 1963 meeting.

A report by the Committee to Study the Scientific Sections recommending major changes in the organizational structure and scientific program of the Association, was presented to the House by the Board of Trustees. The House instructed the Speaker to appoint an Ad Hoc Committee composed of members of the House, and including representatives of the sections, to study the subject and report next June.

In considering a wide variety of resolutions, annual and supplementary reports, the House instructed the Board of Trustees to use every influence at its command to have the Hill-Burton Law amended in such a manner

as to eliminate all categorical grants, eliminate the term "diagnostic and treatment centers" from any listings in the act and prevent federal funds being awarded under existing law as a grant to closed panel medical corporations to build diagnostic and treatment centers. It also declared that it is both the responsibility and duty of the AMA to submit testimony before the Congress on the subject of research appropriations in the health field, urged state and county medical societies to continue promoting the aggressive, consistent development of Blue Shield senior citizen programs, and encouraged medical societies and physicians to provide cooperation and leadership in the formulation and operation of regional hospital planning bodies. In addition, it warned against the dangerously low level of immunization for smallpox and urged physicians and their patients to maintain the needed protection, and it pointed out that state and county medical societies should collaborate with departments of public health in the interest of community health, always keeping in mind the need for a proper balance between local public health programs and the private practice of medicine. In further miscellaneous actions the House authorized the Board of Trustees to investigate the feasibility of establishing a physicians' pension plan and to present a plan for the implementation of such a program to the House in June; instructed the Board of Trustees to study the feasibility of regional clinical sessions, taking into consideration the already established regional meeting of medical specialty groups and the Academy of General Practice; and commended the Council on National Security and its Committee on Disaster Medical Care for initiating a visitation program with committees on emergency medical service of state medical societies.

A report by the American Medical Association Education and Research Foundation disclosed that one out of every 10 medical students in the United States is now benefiting from the new student loan program. Since its inception nine months ago, the program has granted loans totaling more than nine million dollars to 3,042 medical students and 1,787 interns and residents, with applications being received at a rate of 150 per week. It also was announced that Merck Sharp & Dohme pharmaceutical company is making a second matching grant of $100,000 in support of the loan fund. The AMA-ERF also received contributions totaling $440,583 from physicians in five states for financial aid to medical schools.

Respectfully submitted,
Reuben B. Chrisman Jr., M.D., *Chairman*
Francis T. Holland, M.D.
Meredith Mallory, M.D.
Burns A. Dobbins Jr., M.D.
Jere W. Annis, M.D.

News

Dr. W. Dean Warren has been appointed Professor and Chairman of the Department of Surgery at the University of Miami School of Medicine. Currently Associate Professor of Surgery at the University of Virginia School of Medicine, he will assume his new post in February. Dr. Warren is a native of Miami. He attended the University of Florida, was graduated from Dartmouth College and received the M.D. degree from the Johns Hopkins University School of Medicine.

Dr. Richard P. Schmidt has been appointed Chairman of the Department of Medicine at the University of Florida College of Medicine succeeding Dr. Samuel P. Martin who became Provost of the J. Hillis Miller Health Center in August. Dr. Schmidt has been head of the Division of Neurology at the medical school since 1958.

The Florida Association of Industrial and Railway Surgeons has been disbanded effective December 31, according to announcement by Dr. P. G. Batson Jr. of Pensacola, who was president of the specialty organization.

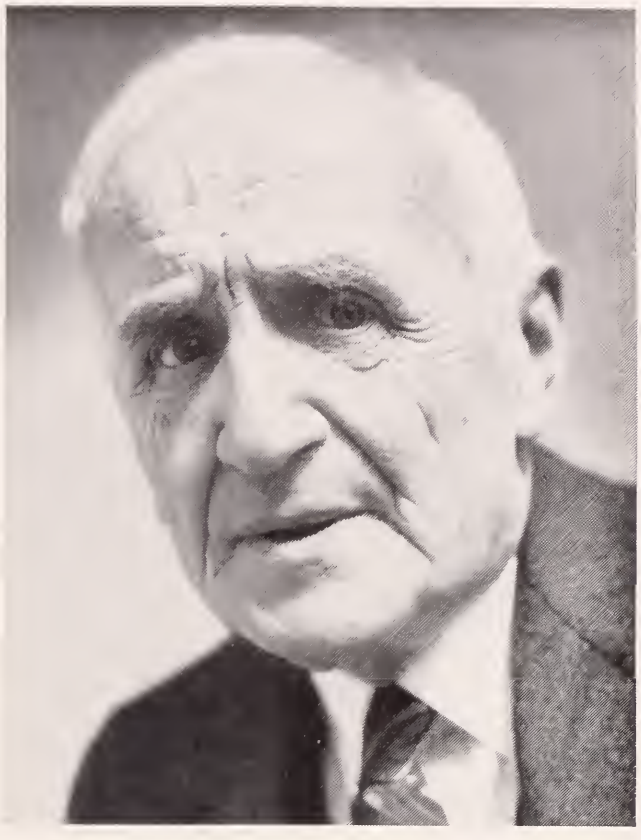
More than 700 persons were screened during the Second Annual Diabetic Health Fair held at the War Memorial Auditorium in Fort Lauderdale during National Diabetes Week the middle of November. Glaucoma testing was carried out by local ophthalmologists and routine chest x-rays were done by the Public Health Department. Approximately 6,000 residents of Broward, Palm Beach and Dade Counties attended the Fair to see films and hear lectures on diets, complications of diabetes, medications, etc., by members of the Broward County Medical Association and by representatives of pharmaceutical manufacturers. An interesting exhibit was presented by local anesthesiologists, and Dr. Edward R. Annis, President-Elect of the American Medical Association, discussed the topic "Let's Live a Little Longer."

Dr. Leo M. Wachtel of Jacksonville has been appointed a member of the State Board of Health by Governor Farris Bryant.

Dr. Jere W. Annis of Lakeland has received the annual Professional Award for 1962 given by the Florida Rehabilitation Association. It was presented to Dr. Annis at the recent meeting of the Association in Miami.

The University of Miami School of Medicine has received a grant of $291,473 from the John A. Hartford Foundation, Inc., for the continuing study of regional perfusion in man. Major target is the development of techniques and equipment capable of achieving prolonged and physiological perfusion for the study and therapy of a number of human disease problems. Principal investigator is Dr. Daniel S. Martin, Associate Professor of Surgery.





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Woman's Auxiliary

Dear Doctor:

The Membership BELLS Are Ringing for the Woman's Auxiliary to the Florida Medical Association! ! !

The BELLS are "Ringing Up" the glad tidings that in 1962 Florida doctor's wives:

1. Contributed $2,972.51 to A. M. A.-E. R. F
2. Sent 346 subscriptions to Bulletin
3. Introduced the WHAM Program
4. Sent thousands of letters and telegrams to State legislators asking them to vote against the King-Anderson Bill
5. Promoted Safety Programs

The BELLS are "Ringing Out" the facts that Florida Doctor's wives:

1. Realize the importance of being FRIENDLY AND INFORMED
2. Strive to present a good doctor's wife Image at all times
3. Know the value of presenting attractive, varied and educational Auxiliary Programs
4. Pledge their continued support to help defeat government control of MEDICINE
5. Stress the NEED of ever increasing our MEMBERSHIP

Is your wife an Auxiliary "BELLE"?

If not—NOW IS THE TIME for you to ring the MEMBERSHIP BELL for her to join US.

Sincerely yours,

Mrs. Abbott Y. Wilcox Jr.
Membership Chairman,
Woman's Auxiliary to the
Florida Medical Association

New Members

The following doctors have joined the State Association through their respective county medical Societies.

Active

Adeeb, Allan J., Tampa
Bures, John U., St. Petersburg
Carrier, Patrick A., St. Petersburg
Dameron, George W. Jr., St. Petersburg
Davis, Allan M., Daytona Beach
Dawson, Robert L., St. Petersburg
Dodd, Richard W., Daytona Beach
Dummit, Garland D., St. Petersburg
Eardley, Donald K., Daytona Beach
Fyvolent, Joel D., Tampa
Gallagher, John D., Daytona Beach
Geiger, Albert J. Jr., St. Petersburg

Giesen, Andrew F. Jr., Fort Walton Beach
Goeller, Victor R. Jr., Pensacola
Grimaldi, Americo J., St. Petersburg
Jackson, Kenneth W., Lake Alfred
Jacobs, Daniel M. Jr., Fernandina Beach
Jarrett, Thirl E., St. Petersburg
Judd, Robert C., Cocoa
Loredo, Raul M., Titusville
Marshall, Theodore J., Pensacola
Mezger, Eugene, Lakeland
Moench, George C., Gulfport
Osmon, Leon H., Titusville
Owen, William S., St. Petersburg
Plummer, Kenneth G., Clearwater
Puleo, Anthony J., Daytona Beach
Segal, Samuel J., St. Petersburg
Stone, John W., Lakeland
Straub, Paul J., Largo
Thompson, George A., Daytona Beach
Trump, Richard C., Madeira Beach
Verner, John V. Jr., Lakeland
White, Thomas R., St. Petersburg

Associate

Andreae, Robert L., Ft. Lauderdale
Babcock, Kenneth B., Fort Lauderdale
Barlow, Frank A., Bay Pines
Bleech, David M., Okeechobee
Booras, William P., Jacksonville
Bunn, Joe P., Winter Park
Christian, William A. Jr., Bay Pines
Cooke, Reginald H., Riviera Beach
Cunio, John E., Miami
Dam, Michael E. Jr., Haines City
Davidson, Eugene T., Lakeland
Dodd, James W., West Palm Beach
Donelan, Richard T., Jacksonville
Dorsey, Joseph E., Hollywood
Douglass, William C., Sarasota
Edwards, Harry A. Jr., Miami
Glenn, J. Eugene, Jacksonville
Griner, J. Howard, Tallahassee
Harris, Henry W., Jacksonville
Hayes, James F. Jr., Jacksonville
Hocker, John T., Jacksonville
Hooker, Charles B., Pompano Beach
Howard, Robert C., Jacksonville
Jaffee, Marvin L., Miami
Kaye, Bernard L., Jacksonville
Keiser, Lester, Hollywood
Kiehl, Kenneth C., Sarasota
Killinger, William A., Orlando
Koenigsberg, Max, Bay Pines
Landy, Jerome J., Miami
Mahoney, William F., Sarasota
Masters, Leonard E., Jacksonville
Mitchell, John L., Jacksonville
Moore, Charles L., Lake Worth
Pauly, John F., West Palm Beach
Pierson, John D., Jacksonville
Platock, Gerald M., Jacksonville
Platten, Philip M., Miami
Pool, Winford H. Jr., Tallahassee
Prince, B. Thomas, Orlando
Raynolds, Arthur H., Bay Pines
Rose, Howard N., Jacksonville
Schultz, Don L., Sarasota
Schultz, Marvin H., Fort Lauderdale
Skaja, Norbert W., Tallahassee
Snedeker, Bernard C., Fort Lauderdale
Stewart, Calvin R., Orlando
Underwood, Patricia S., Miami
Veldhouse, Richard H., Sarasota
Vinton, Richard A. Jr., Sarasota
Ware, Stephen C., Bay Pines
Weise, Edmund R., Jacksonville
Wollin, Ernest, Coral Gables

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Thirty-First Annual Assembly

MARCH 18, 19, 20, 21, 1963

(Monday, Tuesday, Wednesday, Thursday)

AMERICANA HOTEL ● MIAMI BEACH, FLA.

Speakers

Monday, March 18

ROBERT M. ZOLLINGER, M.D., (Guest), Columbus, Ohio
Ulcerogenic Tumor of the Pancreas

BENTLEY P. COLCOCK, M.D., (Guest), Boston, Mass.
The Diagnosis and Treatment of Cancer of the Colon and Rectum

JENNINGS K. OWENS, JR., M.D., Bennettsville, S. C.
Polyposis of the Colon with Special Reference to Regression of Polyps in the Distal Rectum After Total Colectomy

Discusser: DAVID R. PICKENS, JR., M.D., Nashville, Tenn.

RICHARD T. SHACKELFORD, M.D., Baltimore, Md.

ELLIOTT R. FISHEL, M.D., Baltimore
Practical Value of Routine Prostoscopy for the Surgeon

Discusser: To be announced

CHARLES RIESER, M.D., Atlanta, Ga.
The Urological Complications of Abdomino-Perineal Resection

Discusser: JOHN H. JURIGE, M.D., Louisville, Ky.

ISIDORE COHN, JR., M.D., New Orleans, La.

ALVIN M. COTLAR, M.D., New Orleans, La.

LEOPOLD RICHARD, JR., M.D., New Orleans, La.
Intraperitoneal Kanamycin—Clinical Experience

Discusser: ROGER SHERMAN, M.D., Memphis, Tenn.

WALTER H. GERWIG, JR., M.D., Clarksburg, W. Va.
Use of Temporary Gastrostomy in Abdominal Operations

Discusser: T. BRANNON HUBBARD, JR., M.D., Montgomery, Ala.

HARWELL WILSON, M.D., Memphis, Tenn.
Presidential Address

HILGER PERRY JENKINS, M.D., (Guest), Chicago, Ill.
Cine Survey of Surgery of the Stomach and Duodenum

HENRY N. HARKINS, M.D., (Guest), Seattle, Wash.
The Modified Combined Operation Incorporating Selective Gastric Vagotomy for the Surgical Treatment of Duodenal Ulcer

E. R. WOODWARD, M.D., Gainesville, Fla.
Combined Surgery for Esophageal Sliding Hiatus Hernia and Reflux Esophagitis

Discusser: JOHN P. WILSON, M.D., Atlanta, Ga.

LESTER R. DRAGSTEDT, M.D. (Guest), Gainesville, Fla.
Peptic Ulcer, A Problem in Abnormal Gastric Secretory Physiology

H. WILLIAM SCOTT, JR., M.D., Nashville, Tenn.
Physiologic and Clinical Consideration in the Surgical Management of Duodenal Ulcer

Discusser: JOHN A. HEMMER, M.D., Louisville, Ky.

Panel Discussion: GASTROINTESTINAL BLEEDING
Moderator: ROBERT M. ZOLLINGER, M.D., Columbus, Ohio

Discussers: JOHN J. FARRELL, M.D., Miami, Fla.
WILLIAM H. MORETZ, M.D., Augusta, Ga.
RALPH BOWERS, M.D., Memphis, Tenn.

Tuesday, March 19

BENTLEY P. COLCOCK, M.D., (Guest), Boston, Mass.
Surgical Treatment of Regional Enteritis

ROBERT M. ZOLLINGER, M.D., (Guest), Columbus, Ohio
Diagnosis and Management of Intestinal Obstruction

EDWARD F. PARKER, M.D., Charleston, S. C.
The Treatment and Results in Carcinoma of the Esophagus

Discusser: MERRILL W. SCHELL, M.D., Owensboro, Ky.

JAMES H. WALKER, M.D., Charleston, W. Va.

MARK H. WHOLEY, M.D., Charleston, W. Va.
The Use of Radioactive Gas in the Detection of Left to Right Intracardiac Shunt

Discusser: L. M. BARGERON, JR., M.D., Birmingham, Ala.

JAMES W. PATE, M.D., Memphis, Tenn.
Diseases of the Aortic Arch

Discusser: LEWIS H. BOSHER, JR., M.D., Richmond, Va.

ALTON OCHSNER, JR., M.D., New Orleans, La.
The Importance of Recognizing Accelerated Coagulation in the Surgical Management of Patients with Occlusive Arterial Disease

Discusser: JOHN CLASSEN, M.D., Baltimore, Md.

ROBERT J. COFFEY, M.D., Washington, D. C.
Problems in Diagnosis and Treatment of Hyperparathyroidism

Discusser: E. R. WOODWARD, M.D., Gainesville, Fla.

HOWARD HOLT BRADSHAW, M.D., Winston-Salem, N. C.
Acute Hyperparathyroid Poisoning

Discusser: ROBERT THOMASON, M.D., or WILLIAM H. AMSPACHER, M.D., Greenville, S. C.

FORUM ON PROGRESS IN SURGERY

Ten papers of ten minutes each will be selected on a competitive basis. Announcement of selection of papers will be made in early January 1963 and the names of authors and titles of papers will appear in the final program.

The committee in charge of forum is composed of:

CURTIS ARTZ, M.D., Jackson, Miss., Chairman

ROBERT J. COFFEY, M.D., Washington, D. C.

ROGER SHERMAN, M.D., Memphis, Tenn.

Wednesday, March 20

RICHARD W. TELINDE, M.D., (Guest), Baltimore, Md.
The Surgical Treatment of Urinary Incontinence in Women

WILLIAM READ, M.D., Winter Haven, Fla.
Causes and Reduction of Mortality in Abdominal Surgery

WILLARD H. PARSONS, M.D., Vicksburg, Miss.

Discusser: WILLIAM R. BOSIEN, M.D., Tryon, N. C.

J. C. THOROUGHMAN, M.D., Atlanta, Ga.

G. W. GINGRICH, M.D., Atlanta, Ga.

DOYLE HAYNES, M.D., Atlanta, Ga.
The Use of the T-Tube in Difficult Duodenal Stump Closure—Report of 70 Cases

Discusser: J HARVEY JOHNSTON, JR., M.D., Jackson, Miss.

LESTER A. BROWN, M.D., Atlanta, Ga.
The Magic Otologic Number is "Thirty"

Discusser: THOMAS E. BOOTH, M.D., Louisville, Ky.

JOSEPH F. KELL, JR., M.D., Richmond, Va.
The Diagnosis and Treatment of Brain Abscess—Past and Present

Discusser: Carrel Mayo Gaudill, M.D., Charleston, W. Va.

Walter G. Haynes, M.D., Birmingham, Ala.
Surgical Treatment of Cervical Spondylosis

Discusser: Arthur A. Morris, M.D., Washington, D. C.

Charles F. Wood, M.D., Louisville, Ky.
Analysis of Football Injuries Occurring in High School and College Players

Discusser: H. R. Soboloff, M.D., New Orleans, La.

Oscar P. Hampton, Jr., M.D., (Guest), St. Louis, Mo.
Fractures and Fracture-Dislocations About the Ankle

Henry N. Harkins, M.D., (Guest), Seattle, Wash.
The Nyhus Preperitoneal Repair for All Groin Hernias—Clinical Experiences With Over 500 Cases

William R. Sandusky, M.D., Charlottesville, Va.
The Treatment of Pseudocyst of the Pancreas

Discusser: John Rankin, M.D., Wheeling, W. Va.

Thad Moseley, M.D., Jacksonville, Fla.
Evaluation of Leucine Aminopeptidase Serum Level Value in the Diagnosis of Carcinoma of the Pancreas in a County Hospital

Discusser: Martin Sternberg, M.D., Miami, Fla.

T. Brannon Hubbard, Jr., M.D., Montgomery, Ala.
Pitfalls and Safeguards in Biliary Surgery

Discusser: Harry Lee Claud, M.D., Washington, D. C.

R. Arnold Griswold, M.D., Louisville, Ky.
Biliary Tract Disease

Discusser: To be announced

Panel Discussion: HERNIA

Moderator:
Amos R. Koontz, M.D., Baltimore, Md.

Discussers:
Henry N. Harkins, M.D., Seattle, Wash.
Hugh C. Ilgenfritz, M.D., Shreveport, La.
John P. Wilson, M.D., Atlanta, Ga.

Thursday, March 21

Oscar P. Hampton, Jr., M.D., (Guest), St. Louis, Mo.
Open Reductions of Fractures, Why and When

J. Keith Cromer, M.D., Washington, D. C.
Further Observations on the Multicentric Origin of Carcinomas of the Female Anogenital Tract

Discusser: Matthew A. Larkin, M.D., Miami, Fla.

Ernest A. Gould, M.D., Washington, D. C.
The Prognosis of Carcinoma of the Breast Involving the Medial Half

Discusser: W. C. Sumner, M.D., Jacksonville, Fla.

H. Max Schiebel, M.D., Durham, N. C.
The Rationale of Combined Radical Mastectomy and Adjuvant Chemo-Therapy in the Treatment of Carcinoma of the Breast

Discusser: John C. Hawk, Jr., M.D., Charleston, S. C.

W. C. Shands, M.D., Jackson, Miss.
Soft Tissue Sarcoma in Children

Discusser: Elliott Scarborough, M.D., Atlanta, Ga.

Harold S. Engler, M.D., Augusta, Ga.

William Moretz, M.D., Augusta, Ga.
Cancer Occurring in Old Burn Scars

Discusser: Robert Miles, M.D., Memphis, Tenn.

Hilger Perry Jenkins, M.D., (Guest), Chicago, Ill.
Survey of Surgery of the Small Intestine

Richard W. TeLinde, M.D., (Guest), Baltimore, Md.
Endometriosis

NURSES' PROGRAM

Monday Morning, March 18

Presiding: Miss Isabel Mustard, R.N., Miami, Fla.

Moderator: Joseph Stewart, M.D., Miami, Fla.

Roger Sherman, M.D., Memphis, Tenn.
What Nurses Should Know About Wound Infections

Amos Koontz, M.D., Baltimore, Md.
Abdominal Evisceration—A Postoperative Complication

Manuel Ross, M.D., Clifton Forge, Va.
The Handling of Postoperative Complications of Anesthetized Patients

Question and Answer Period: 1st Discusser, Mrs. Jean Hodges, R.N., Miami, Fla. 2nd Discusser: J. M. Emmett, M.D. Clifton Forge, Va.

Miss Dana Hudson, R.N., Atlanta, Ga.
Changing Role of the Nurse (The Nurse and Nursing in the Future)

J. D. Martin, Jr., M.D., Atlanta, Ga.
What Does the Doctor Expect of the Nurse Today and Nursing in the Future

Presidential Address on Surgical Program—Nurses invited

Monday Afternoon, March 18

Presiding: Miss McKenna, R.N., Miami, Fla.

Moderator: Willard Parsons, M.D., Vicksburg, Miss.

John J. Farrell, M.D., Miami, Fla.
Massive G. I. Hemorrhage

William H. Lee, M.D., Memphis, Tenn.
Blood Substitutes

Curtis P. Artz, M.D., Jackson, Miss.
Type of Surgery Used in Peptic Ulcer Management

Donald S. Daniel, M.D., Richmond, Va.
Nutrition Following Subtotal Gastrectomy (Dumping Syndrome—Physiologic Alterations)

Miss Jeanette Waites, R.N., Jackson, Miss.
Surgical Nursing Care of Patients with Duodenal Ulcer

Question and Answer Period: 1st Discusser, Mrs. Chloe Trammel, R.N., Miami, Fla.

Panel Discussion—Gastrointestinal Bleeding—Surgical Program—Nurses invited

Robert M. Zollinger, M.D., Columbus, Ohio, Moderator
William H. Moretz, M.D., Augusta, Ga., Discusser
Ralph Bowers, M.D., Memphis, Tenn., Discusser
John J. Farrell, M.D., Miami, Fla., Discusser

Tuesday Morning, March 19

Presiding: Mrs. Lydon, R.N.

Moderator: Gwendolyn Connor, M.D.

Forum on All Phases of Hypothermia
Lecture and Demonstration on Hyperthermia
The Handling of Postoperative Complications in Hypothermia

Andrew Piergeorge, M.D., Anesthesiologist
Duard Lawrence, M.D., Anesthesiologist
Francis Cooke, M.D., Cardiologist

David Reynolds, M.D., Neurosurgeon
Mrs. Delores Wetherington, R.N.
Cardiac Standstill
External Cardiac Massage
Defibrillation
Francis Cooke, M.D.
M. W. Wolcott, M.D.
Mrs. Doris Eckoff, R.N.
Miss Ardis Caswell, R.N.
Question and Answer Period

Tuesday Afternoon, March 19

Presiding: Miss Marie Oscar, R.N., Miami, Fla.

Moderator: Murray M. Copeland, M.D., Houston, Texas

A. P. Jarrell, LL.D., Atlanta, Ga.
A Rehabilitation Program for a State

Floyd Bliven, M.D., Augusta, Ga.
The Rehabilitation Team in Orthopedics

Mrs. Rose McGee, R.N., Atlanta, Ga.
Rehabilitation of Mastectomy Patients

Marvin Flannery, M.D., Miami, Fla.
Rehabilitation of Colostomy Patients

Demonstration Colostomy and Ileostomy by a member of Colostomy Club in Miami

Mrs. Dorothy L. Luther, R.N., Gainesville, Fla.
Progressive Patient Care and Surgical Nursing

Question and Answer Period: 1st Discusser, Joseph T. Jana, Jr., M.D., Miami, Fla. 2nd Discusser, Mrs. Helen Howlett, R.N., Miami, Fla.

Speakers are listed as nearly as possible as they will appear in the completed program which will be ready February 15. Hotel reservations should be made early. (Write the manager of the Americana Hotel.)

For further information write to:

A. H. Letton, M.D., Secretary
The Southeastern Surgical Congress
340 Boulevard, N.E.
Atlanta 12, Ga.

Meetings

February

Seminar on Psychiatry in Medical Practice, begins February 6 for 18 Wednesday nights, Jackson Memorial Hospital, Miami

Midwinter Seminar in Ophthalmology and Otolaryngology, Seventeenth Annual, February 4-9, Americana Hotel, Bal Harbour, Miami Beach

March

Watson Clinic Seminar, March 2, Watson Clinic, Lakeland

Seminar in Obstetrics and Gynecology, March 7-8, University of Florida College of Medicine, Gainesville

Central Florida Medical Meeting, Ninth Annual, Orange County Medical Society, March 15-16, Cherry Plaza Hotel, Orlando

Southeastern Surgical Congress, March 18-21, Americana Hotel, Bal Harbour, Miami Beach

Seminar on Clinical Practice, March 28-29, University of Florida College of Medicine, Gainesville

Advances in Angiography, sponsored by Department of Radiology, University of Miami School of Medicine, Fontainebleau Hotel, Miami Beach

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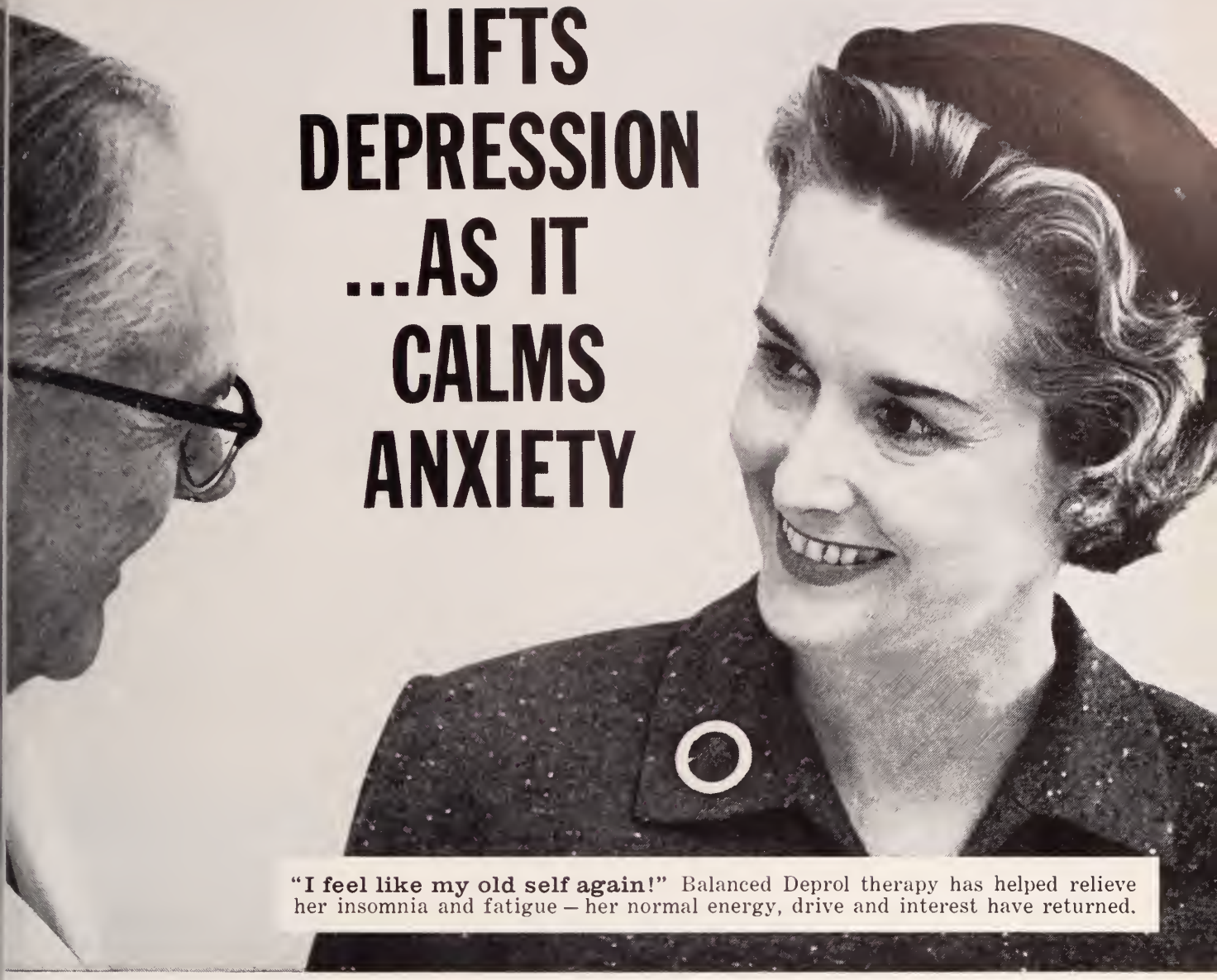
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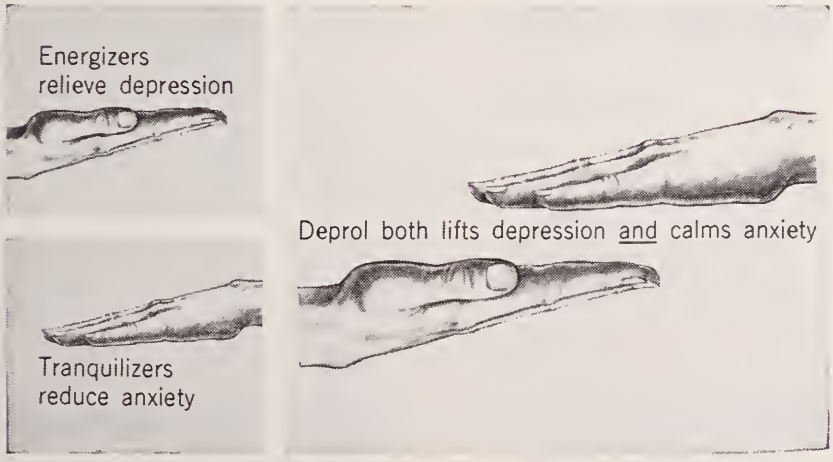
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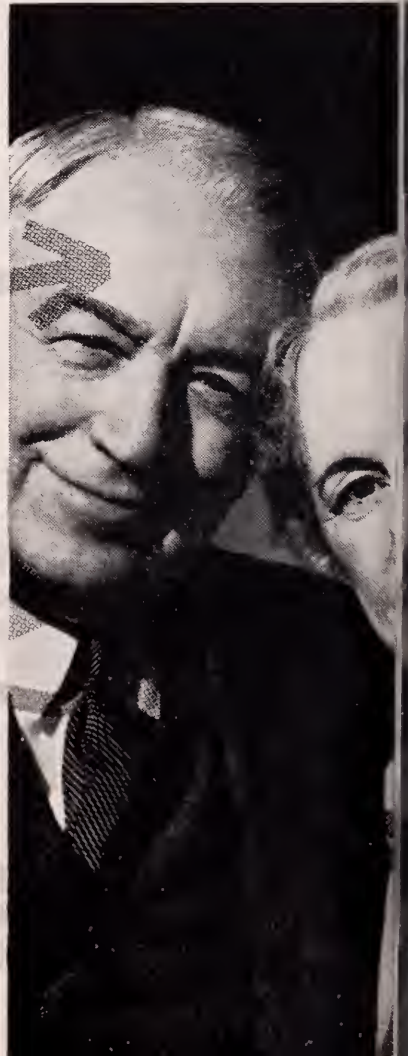
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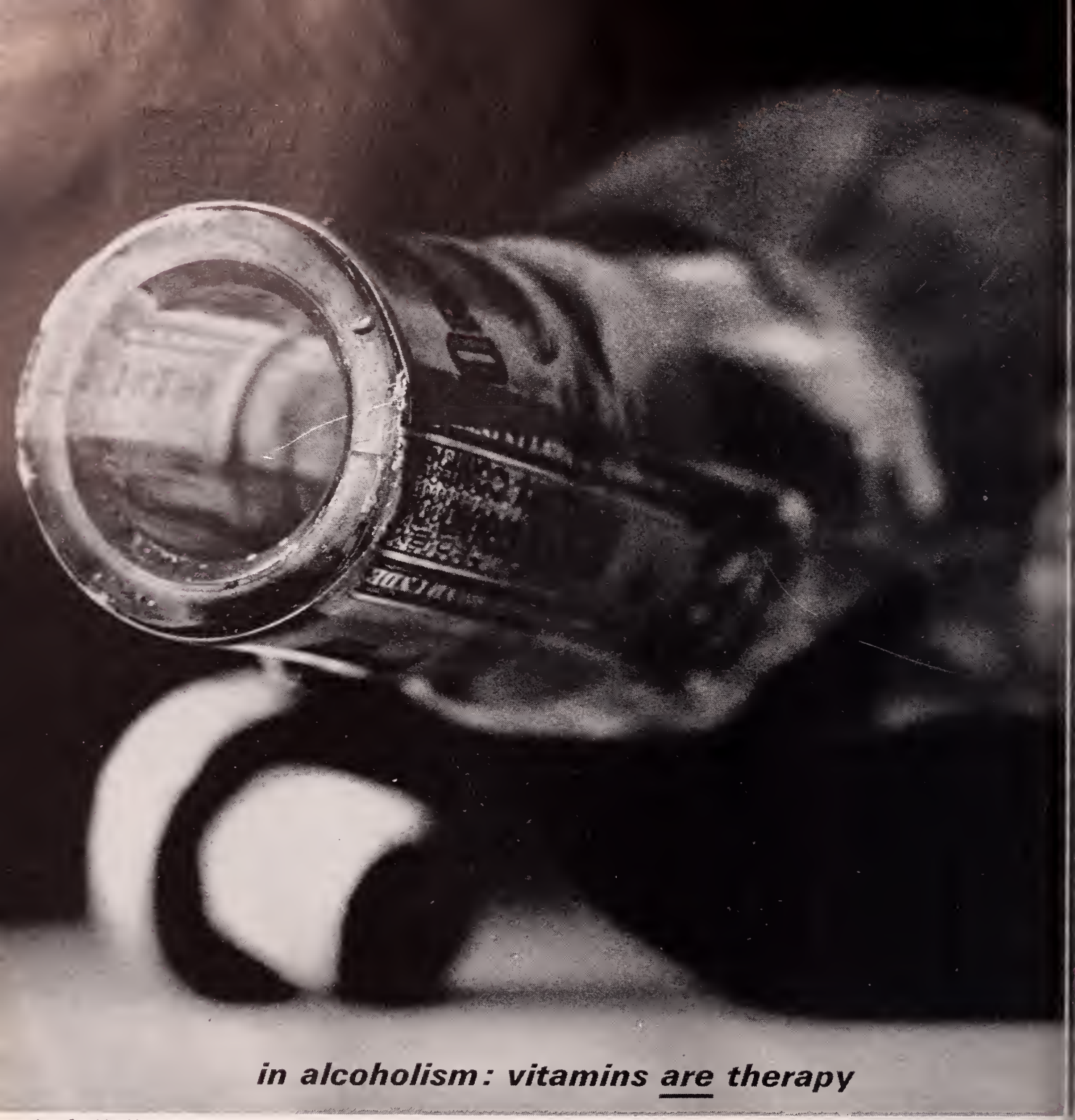
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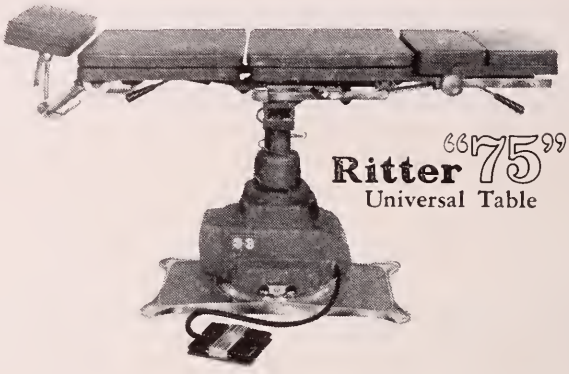
One instance of hemoglobin depression (less than 10 Gm.) which may have been drug-related was reported, in 306 patients; a return to an essentially normal level followed the discontinuance of medication.

One case of jaundice has been reported. Elevation of cephalin flocculation tests in several instances were not paralleled by changes in other liver function parameters. Urinalyses in 280 patients were essentially normal; false positive Benedict's tests, due to an unknown reducing substance in the urine, were reported in 9 patients.

contraindications: Do not administer to patients with known tendency to drug-induced anemia, or give to them only under careful supervision. Not recommended for use during pregnancy.

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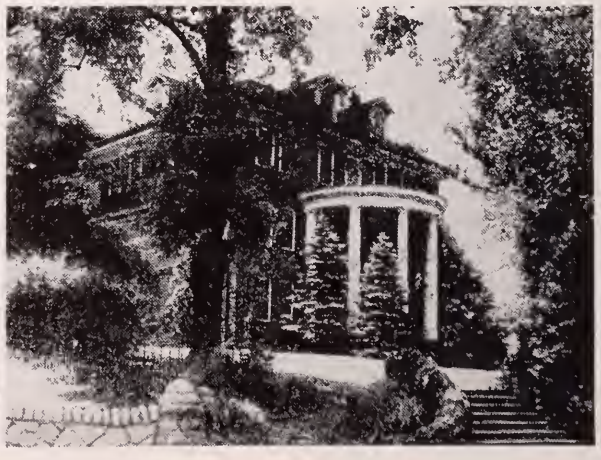
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REFER TO PDR

Poythress, White Section, Page 808 (1963 edition) and Product Identification Section

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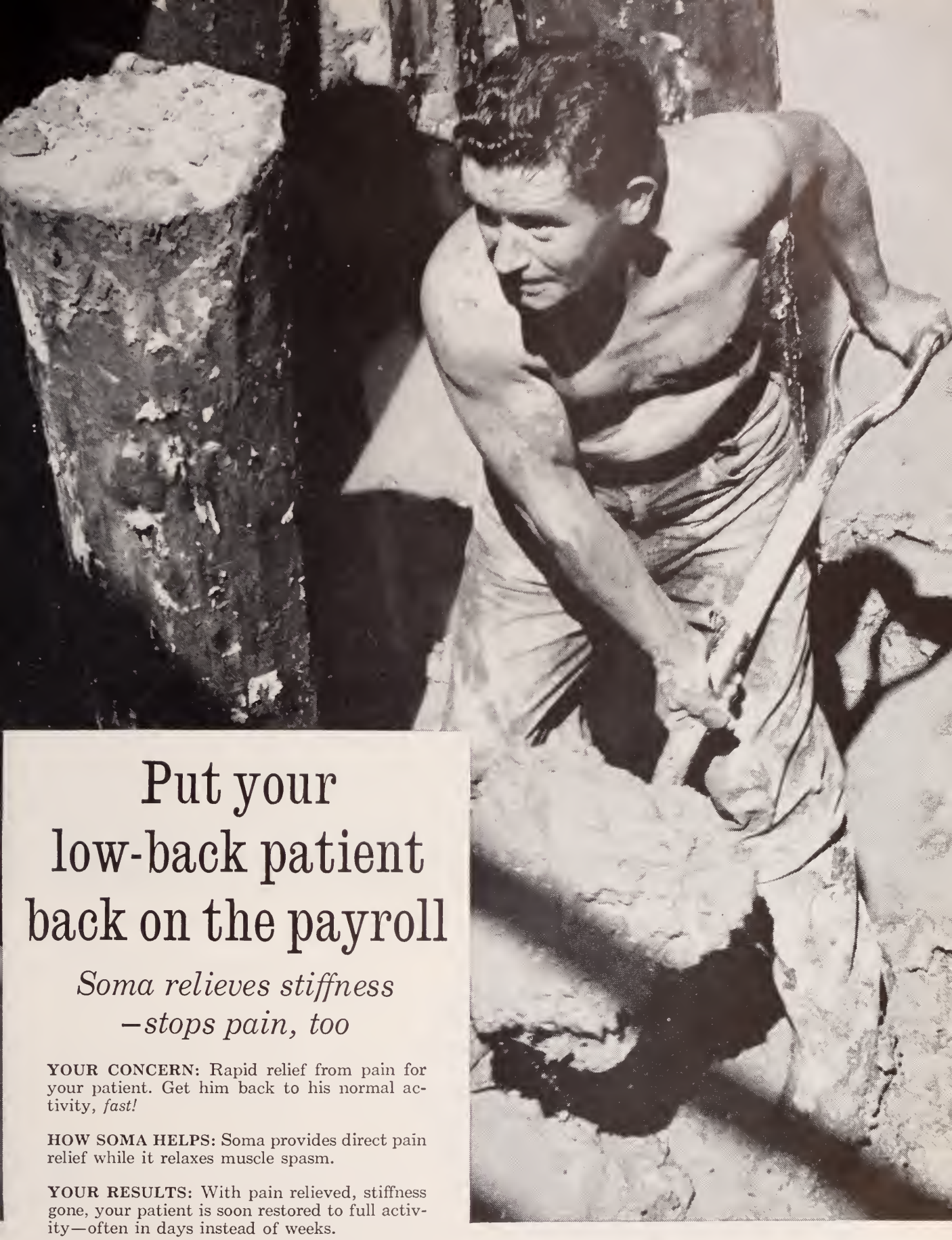
CAUTION: Not to be used when testosterone is contra-indicated. Federal law prohibits dispensing without prescription.

1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

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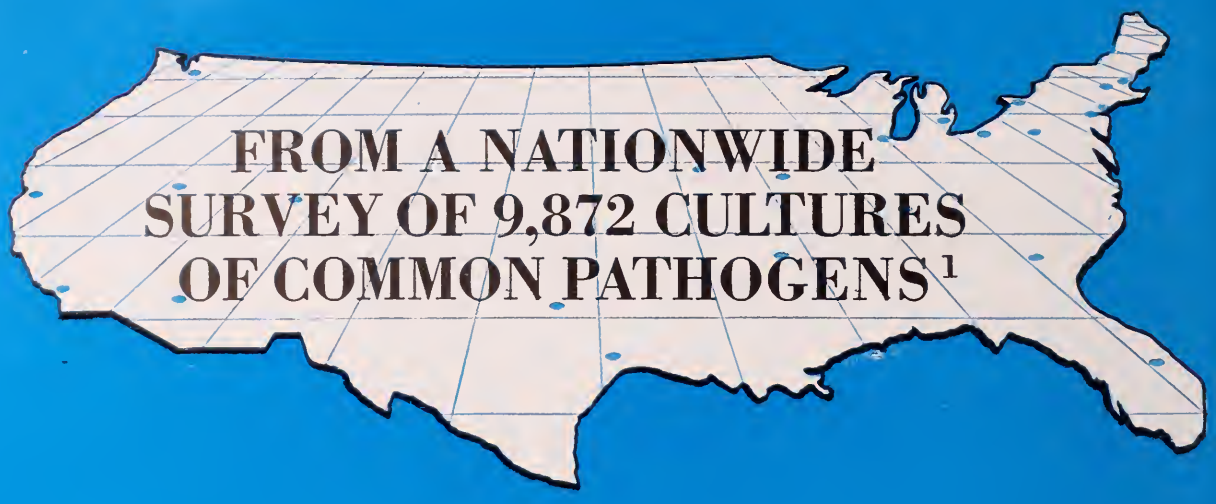
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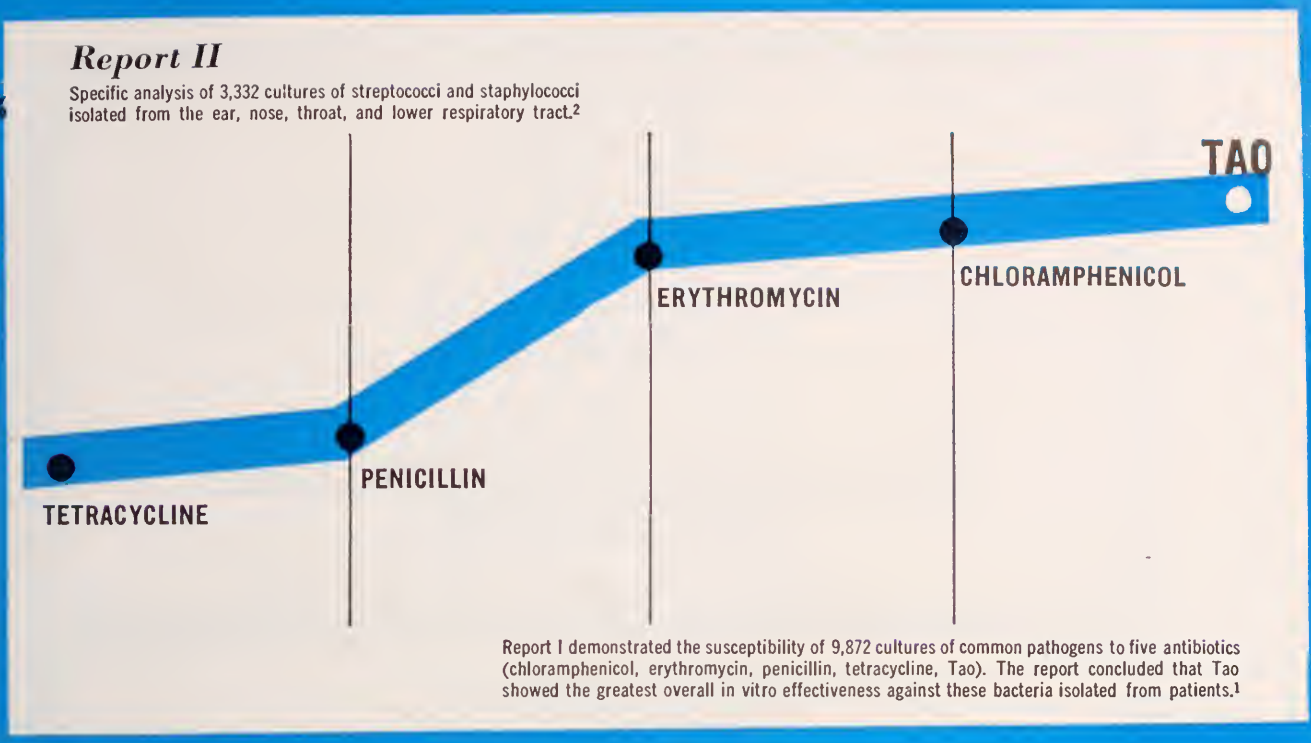
FROM A NATIONWIDE SURVEY OF 9,872 CULTURES OF COMMON PATHOGENS[1]

Conclusions of Nationwide Survey: *Report I*

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2. Overall results showed a higher percentage of susceptibility among these common pathogens to Tao than to the other antibiotics. Susceptibility to Tao was greatest, not only in respiratory streptococci and staphylococci, but also in these organisms isolated from skin and soft tissue (3,423 cultures), genitourinary and gastrointestinal tracts and other sources (2,458 cultures). Susceptibility was equal to all antibiotics tested in pneumococci from unspecified sources (463 cultures), and less to Tao in H. influenzae from unspecified sources (196 cultures).

3. Tao has been used for five years without development of predictable cross resistance. In 1958 and 1961, approximately 73% and 70%, respectively, of erythromycin-resistant problem staphylococci showed susceptibility to Tao.[3,4] The present study confirms the continuing high degree of Tao activity even against these pathogens. Of 1,592 cultures of erythromycin-resistant staphylococci, 68% were susceptible to Tao, while in the reverse situation, only 33% of 768 Tao-resistant staphylococci were susceptible to erythromycin.



Report II

Results of Bacterial Susceptibility in 3,332 Respiratory Pathogens

References

1. "Bacterial Susceptibility Patterns: A Geographic Survey." Fowler, J. Ralph, M.D., and Watters, John L., M.D. Scientific Exhibit presented at the Annual Meeting of the American Society of Clinical Pathologists, Chicago, Ill., August 31 to September 9, 1962. 2. Fowler, J. Ralph, Watters, John L. and Levy, Arthur M.: Bacterial Susceptibility Patterns as Related to Geographic Variation and Anatomical Source. In press. 3. English, A. R., and Fink, F. C.: Antibiot. & Chemother. 8:420 (Aug.) 1958. 4. English, A. R., and Fink, F. C.: Antibiot. and Chemother. 11:648 (Oct.) 1961.

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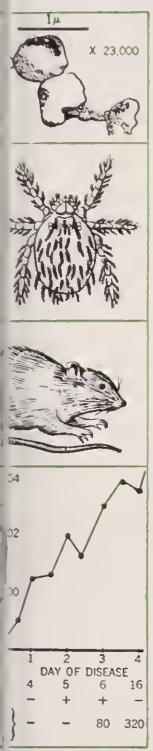
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1. Borota, A., and Grinell, R. N.: J. Amer. Geriatrics Soc., 10:413, 1962.
2. Spoor, H. J.: N.Y. State J.M. 58:3292, 1958.
3. Lubowe, I. I.: Western Med. 1:45, 1960.
4. Weissberg, G.: Clin. Med. 7:1161, 1960.



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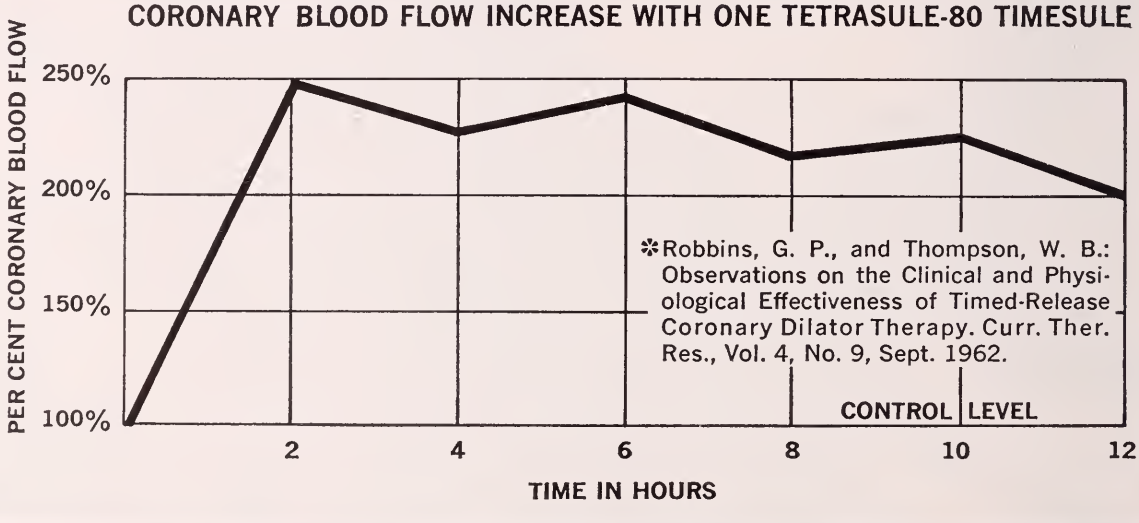


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CAUTION: W. B. PARSON, Jr., JAMA, July 30, 1960. Volume 173, No. 13. Demonstrated side reaction in five of the patients when using substantial dosage of Nicotinic Acid. 3.0 to 7.5 grams daily over a period of two and one-half years. Suggestion was made that tablets be taken with an anti-acid or with meals to avoid high acidity in long term therapy. See PDR-page 548.

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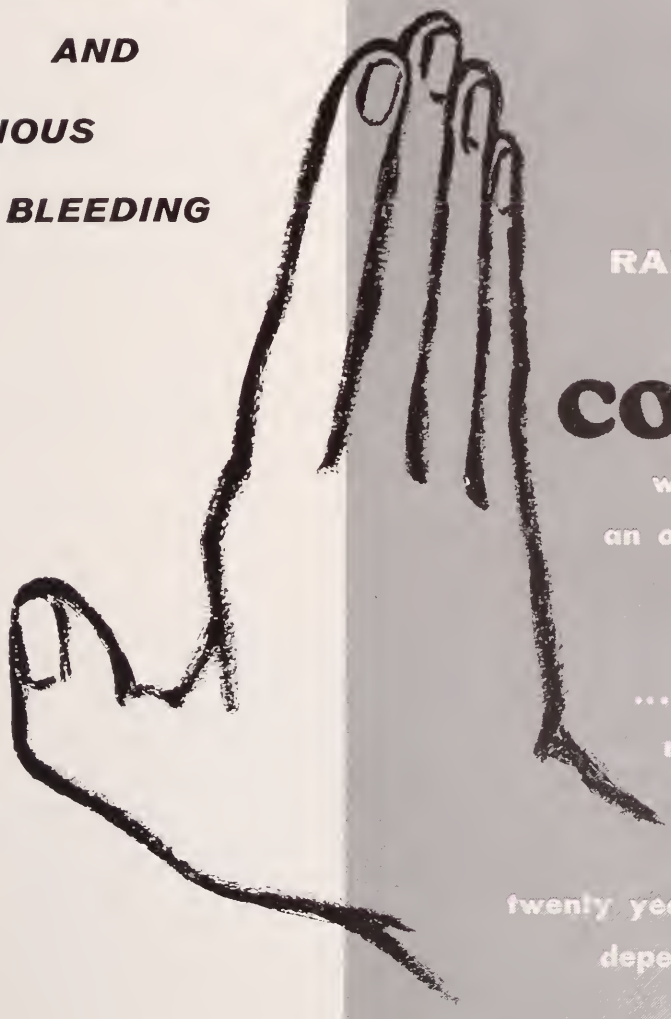
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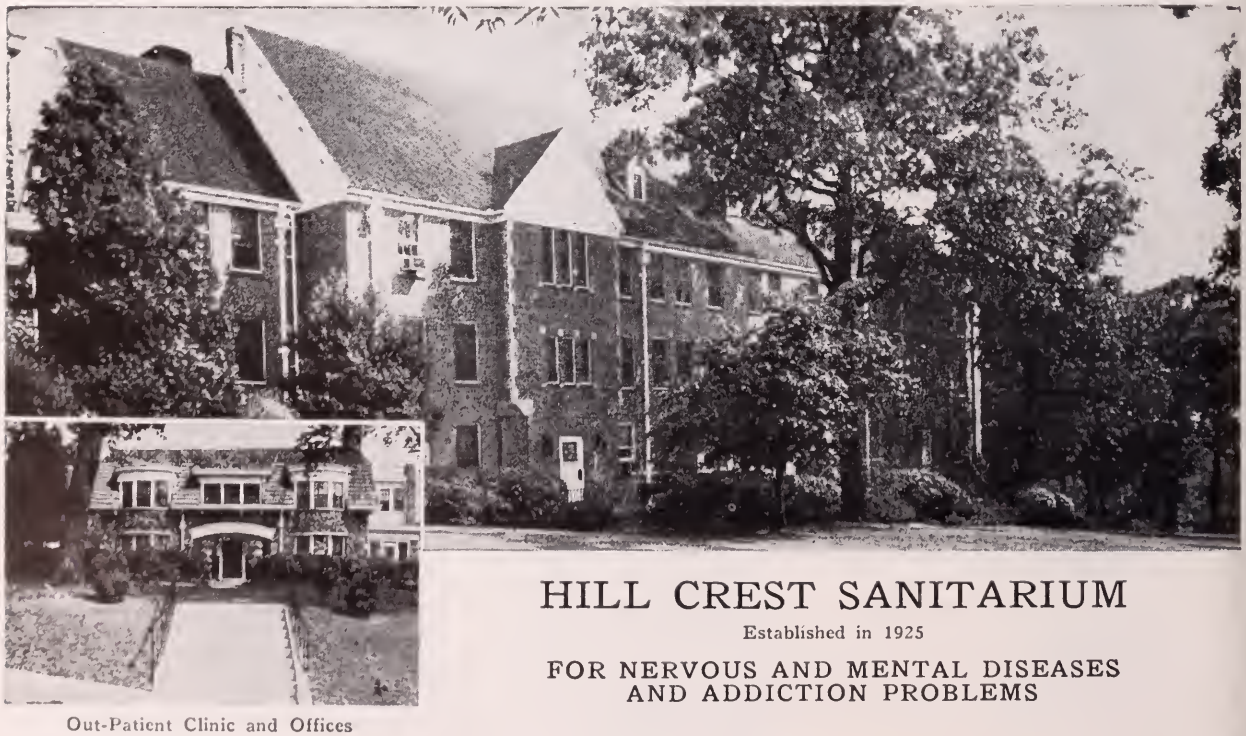
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[1] Simon, F. & Bernstein A.: "The Treatment of Obesity in Patients with Cardiovascular Disease," Angiology, *12*:32-37, Jan. 1961.
[2] Plotz, M.: Modern Management of Obesity, J.A.M.A. *170*:1513-1515 (July 25) 1959.
[3] Bernstein, A. & Simon, F.: "Treatment of Obese Diabetics and Arteriosclerotics," Clin. Med. 907-920, May 1961.

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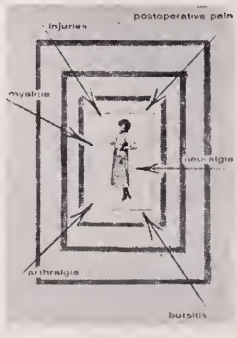
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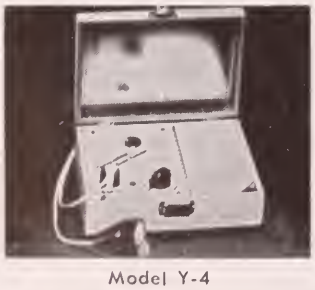
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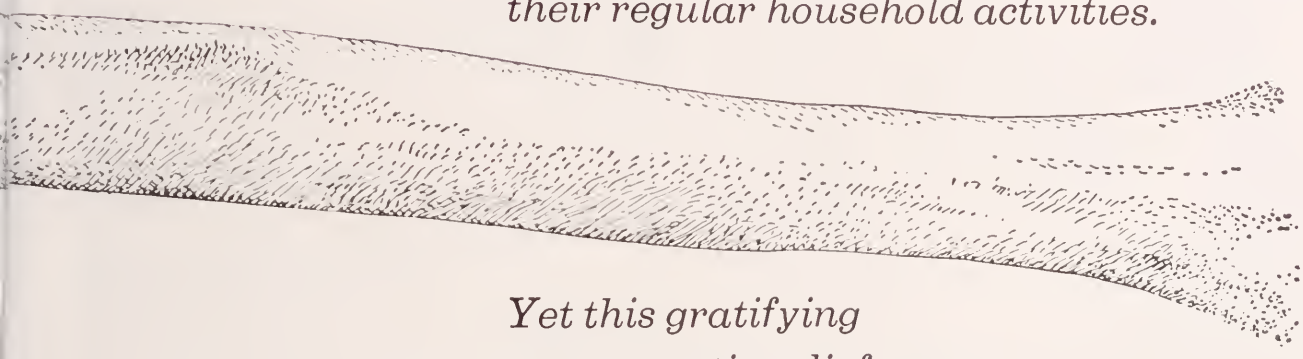


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1. Ford, R. A., and Blanchard, K. P.: J.-Lancet 78:185, 1958.

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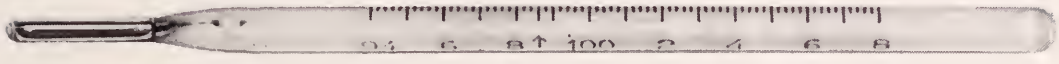
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Complete Heart Block
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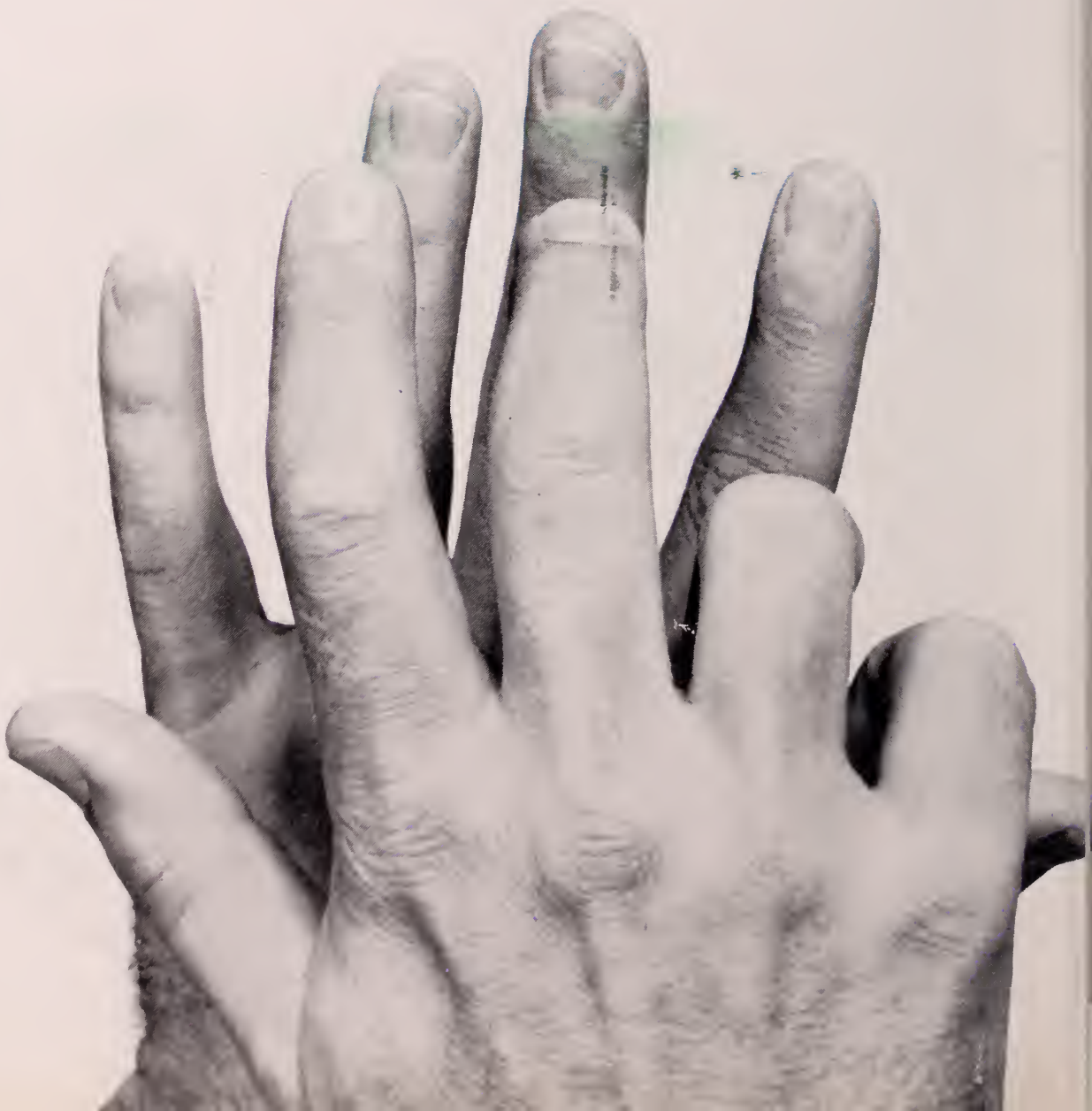
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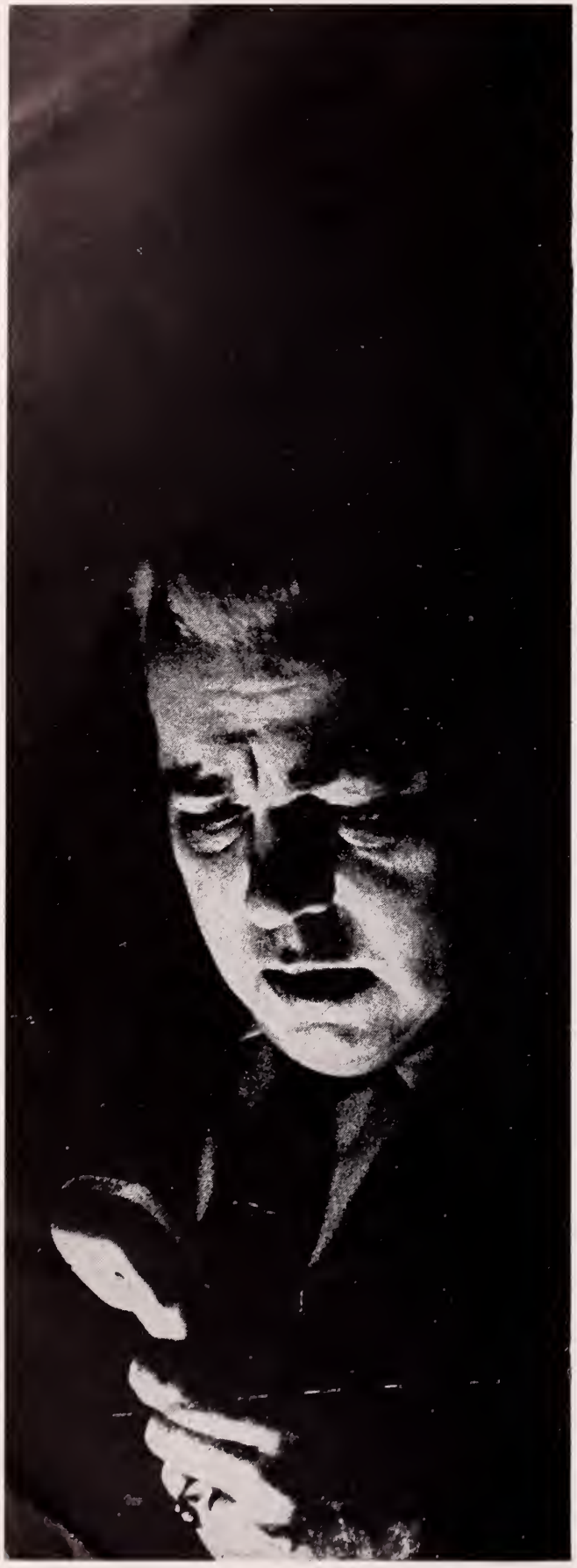
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References: (1) Thacher, H. C., & Fishman, L.: *J. Maine M. A.* **52**:84, 1961. (2) Hopkins, E. W.: *Postgrad. Med.* **29**:451, 1961. (3) Hall, W. H.: *M. Clin. North America* **43**:191, 1959. (4) Krugman, S.: *Pediat. Clin. North America* **8**:1199, 1961. (5) Ede, S.; Davis, G. M., & Holmes, F. H.: *J.A.M.A.* **170**:638, 1959. (6) Wolfsohn, A. W.: *Connecticut Med.* **22**:769, 1958. (7) Calvy, G. L.: *New England J. Med.* **259**:532, 1958. (8) Hendren, W. H., III, & Haggerty, R. J.: *J.A.M.A.* **168**:6, 1958. (9) Cutts, M.: *Rhode Island M. J.* **43**:388, 1960. (10) Berman, W. E., & Holtzman, A. E.: *California Med.* **92**:339, 1960. (11) Vetto, R. R.: *J.A.M.A.* **173**:990, 1960. (12) Sia, C. C. J., & Brainard, S. C.: *Hawaii M. J.* **17**:339, 1958. (13) Rosenthal, I. M.: *GP* **17**:77 (March) 1958. (14) Gaisford, W.: *Brit. M. J.* **1**:230, 1959.

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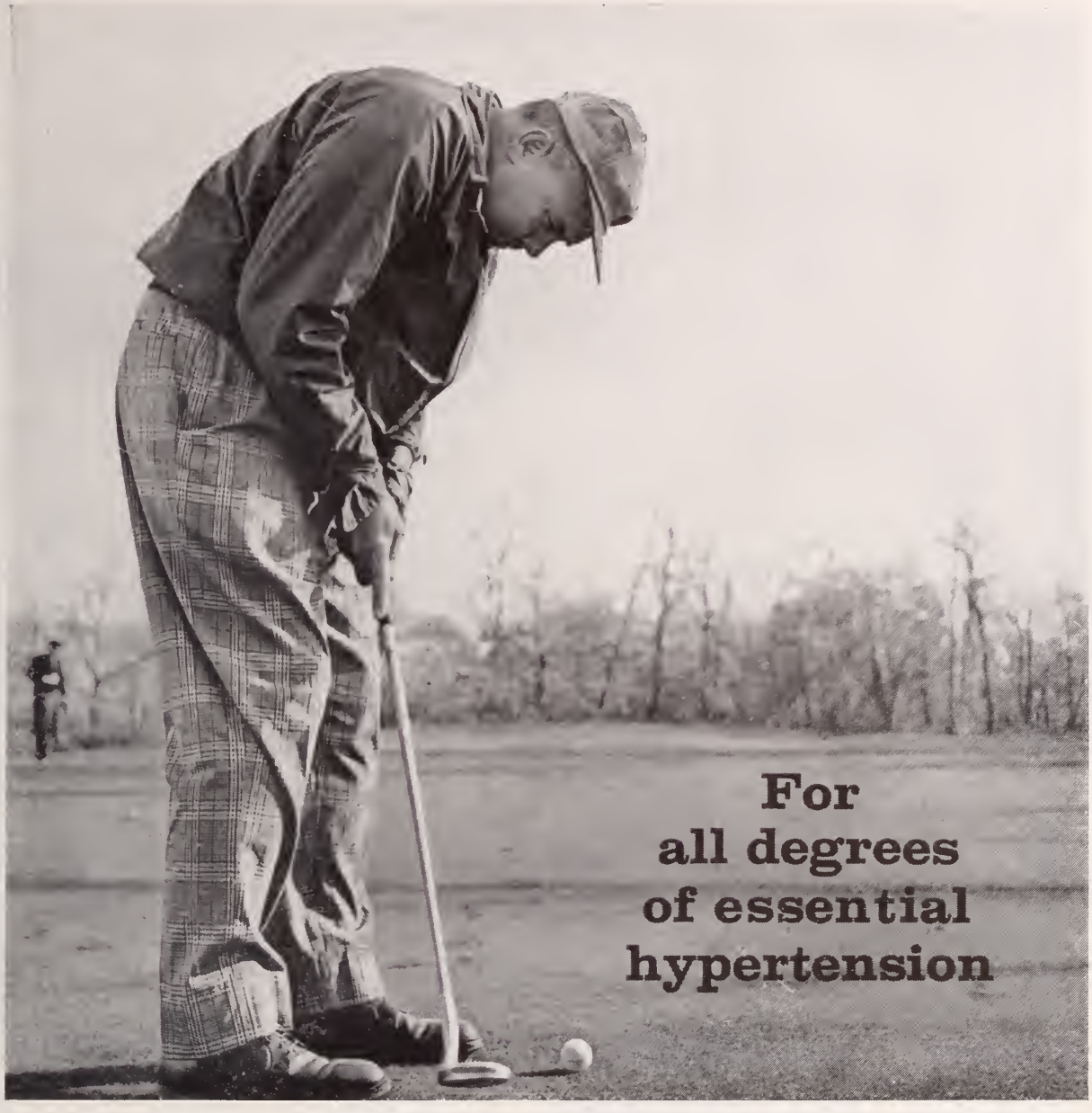
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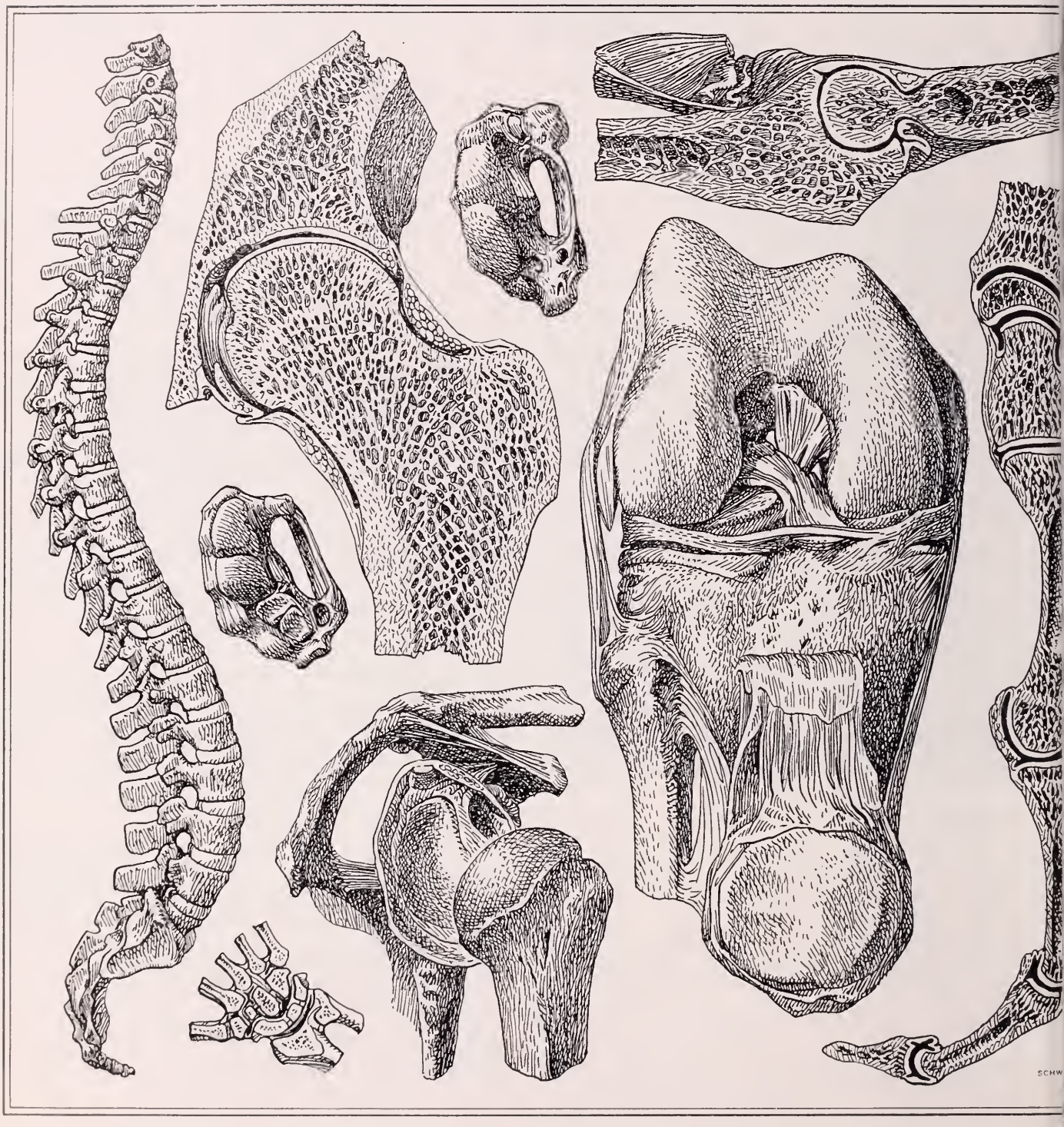
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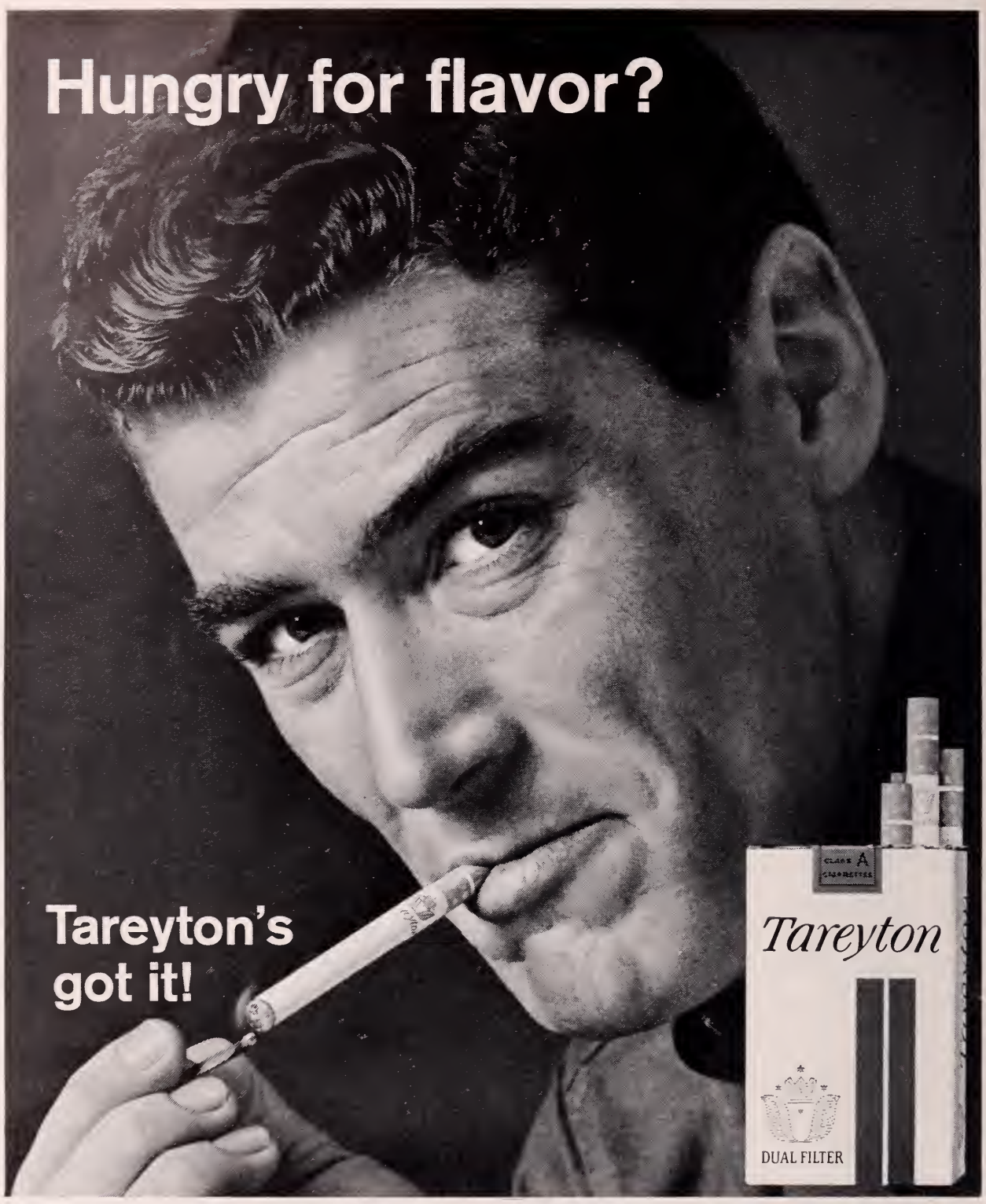
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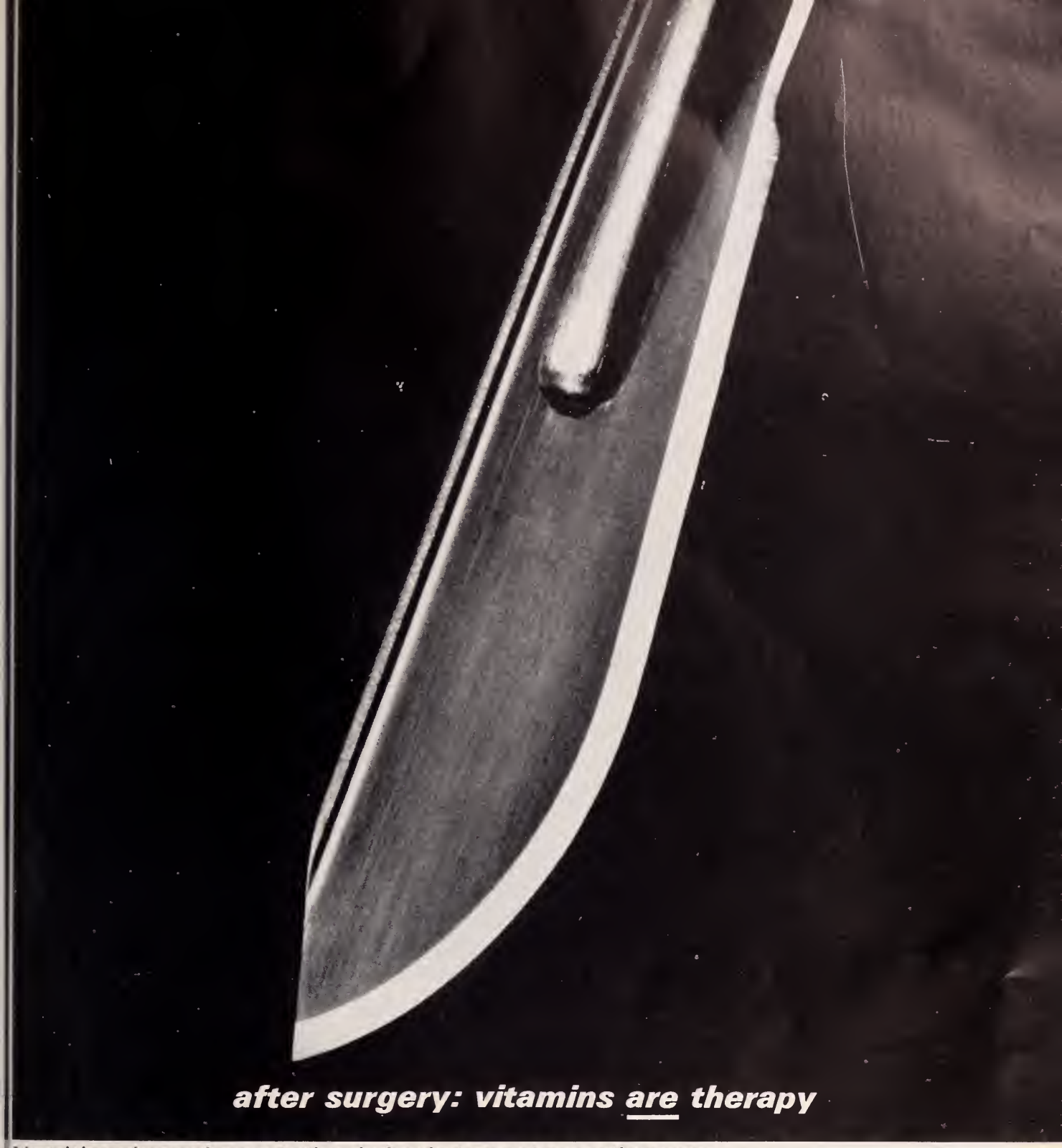
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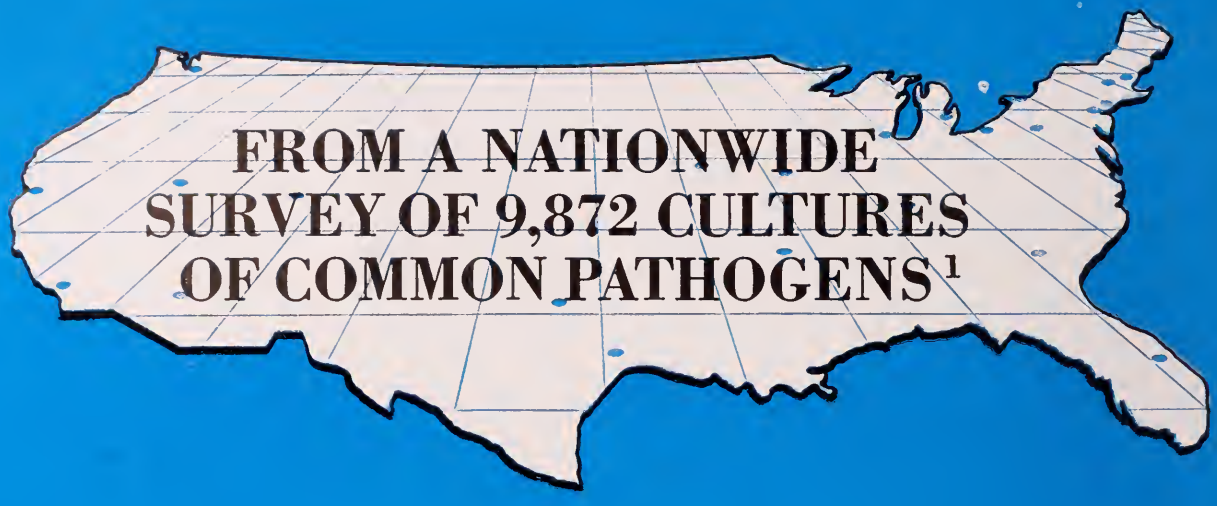
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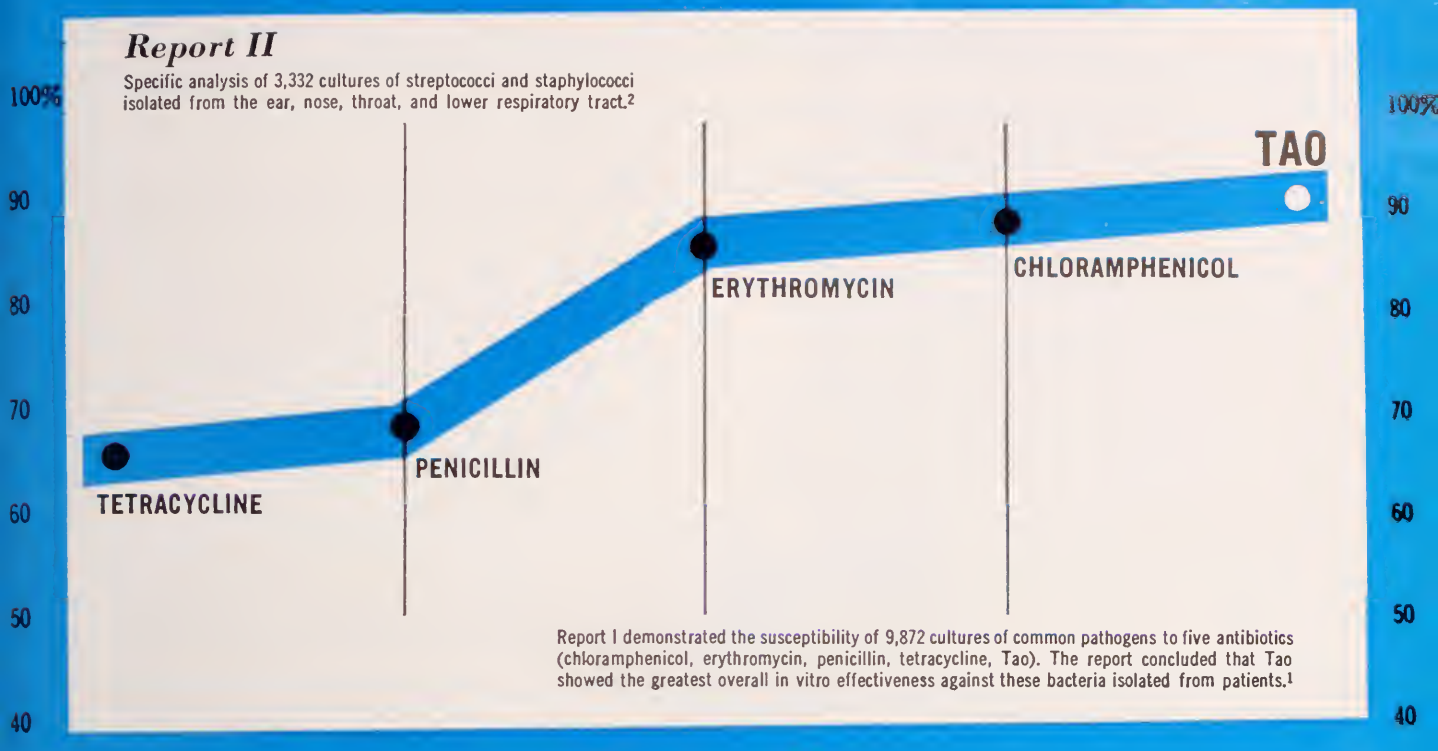
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3. Tao has been used for five years without development of predictable cross resistance. In 1958 and 1961, approximately 73% and 70%, respectively, of erythromycin-resistant problem staphylococci showed susceptibility to Tao.[3,4] The present study confirms the continuing high degree of Tao activity even against these pathogens. Of 1,592 cultures of erythromycin-resistant staphylococci, 68% were susceptible to Tao, while in the reverse situation, only 33% of 768 Tao-resistant staphylococci were susceptible to erythromycin.



Report II

Results of Bacterial Susceptibility in 3,332 Respiratory Pathogens

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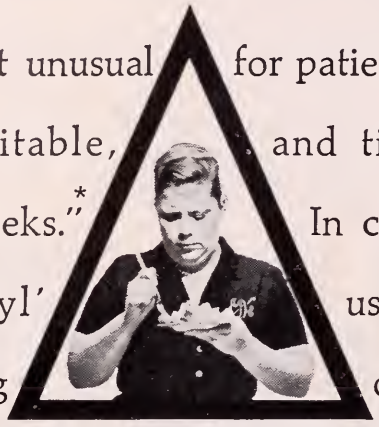
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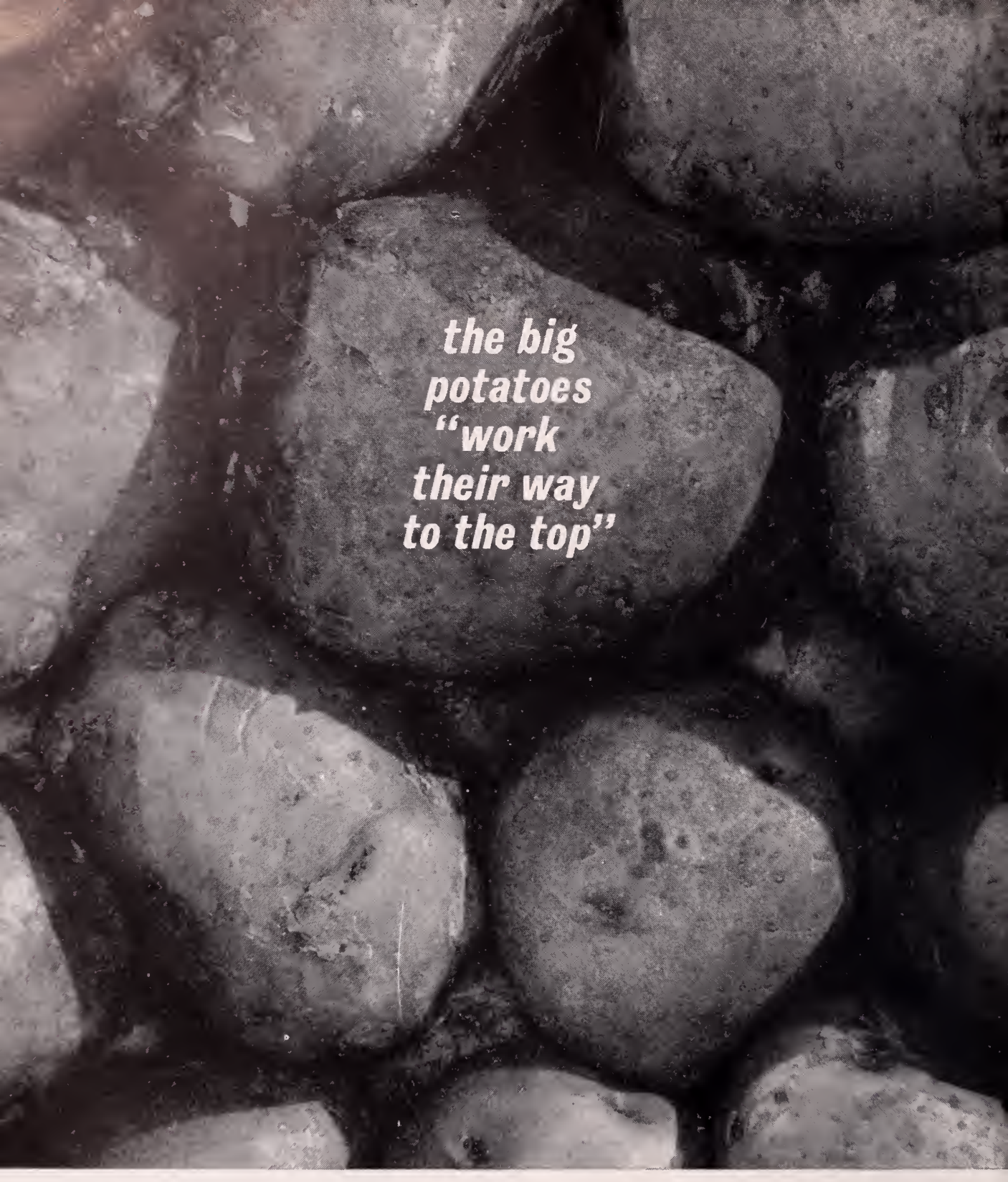
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The Surgical Management of Complete Heart Block

Harold C. Spear, M.D., DeWitt C. Daughtry, M.D.
John G. Chesney, M.D., and Thomas O. Gentsch, M.D.
Miami

With the advent of cardiopulmonary bypass and open heart surgical technics, surgeons have of necessity become intimately concerned with the management of heart block problems. Although initially surgical attention was directed toward heart block resulting from operative repair of septal defects, currently there has been increasing interest in applying various types of electronic equipment to selected patients suffering from Adams-Stokes disease or any other chronic atrioventricular dissociation problems. The purpose of this presentation is to summarize briefly our experiences which, although limited in depth, are sufficiently broad to encompass the various facets of the problem and to outline our current concepts of the surgical management of heart block.

Historical Review (Table 1)

Interest in the clinical application of external electric stimulation to the heart in ventricular standstill was initiated primarily by Zoll.[1,2] This has continued to be an effective emergency measure in acute cases, but is impractical in chronic cases because of painful muscular contractions, skin irritation and ulceration at the electrode sites together with the cumbersome nature of the equipment.

Internal stimulation by means of a myocardial electrode introduced either directly at thoracotomy or percutaneously was devised by Weirich, Lillehei and associates,[3-5] primarily to control heart block induced during repair of septal defects. Although a simple unipolar myocardial wire electrode proved effective for the short term management of reversible postoperative heart block, in chronic cases the myocardium became refractory to stimulation because of the development of fibrosis about the wire implantation site. Hunter, Roth, Bernardez and Noble[6] elaborated a bipolar myocardial electrode to avoid this difficulty. Nevertheless, sinus tract infections along the portal of exit of the wire from the chest wall constituted a serious hazard to the long term application of this type of internal stimulation.[7]

To simplify the technic of internal stimulation, Furman and Schwedel[8,9] employed a Cournand electrode catheter introduced transvenously into the right ventricle. Again, this technic was eminently satisfactory for short term electric stimulation, but when used over a long period, was complicated by spontaneous change in position of the catheter and loss of contact, wire breakage problems, infections and thromboembolic phenomena. In order to circumvent these difficulties, various types of implantable transistorized pacemakers have been devised. The earliest experience with such units was reported by Chardack, Gage and Greatbatch.[10]

Pathogenesis (Table 2)

Untreated complete heart block incurred during the repair of septal defects bordering the atrioventricular node resulted in uniformly high postoperative mortality from insufficient cardiac output to cover the increased metabolic demands of the patient. Even with carefully supervised drug therapy, the mortality rate ranged in the neighborhood of 40 per cent.[5] It was not until the application of electric stimulation that this problem could be controlled with virtually no mortality. Fortunately, in most of the patients there is spontaneous reversion to normal sinus rhythm in two or three weeks and long term stimulation is not required.

Approximately 70 per cent of cases of complete heart block result from coronary heart disease.[11] Almost all of the patients in these cases, except for those whose block develops in conjunc-

Table 1. — Historical Review

I. External electric stimulation (Zoll, 1952)—short term
II. Internal electric stimulation—short term
  A. Unipolar electrode
    1. Implanted at thoracotomy (Weirich et al., 1958)
    2. Introduced percutaneously (Thevenet et al., 1958)
  B. Bipolar electrode (Hunter, Roth et al., 1959)
  C. Electrode catheter (Furman, Schwedel et al., 1959)
III. Implanted transistorized pacemaker system—long term
  A. Totally implanted unit (Chardack et al., 1960, Kantrowitz et al., 1961)
  B. Radiofrequency transmitter (Glenn et al., 1960)

Table 2. — Pathogenesis of Heart Block

I. Surgically induced
II. Coronary heart disease
III. Inflammatory conditions
IV. Digitalis toxicity
V. Congenital

Table 3. — Surgical Experiences

I. External electric stimulation—2 cases
II. Internal stimulation (endocardial) by electrode catheter—5 cases
III. Implantation of an internal pacemaker—1 case

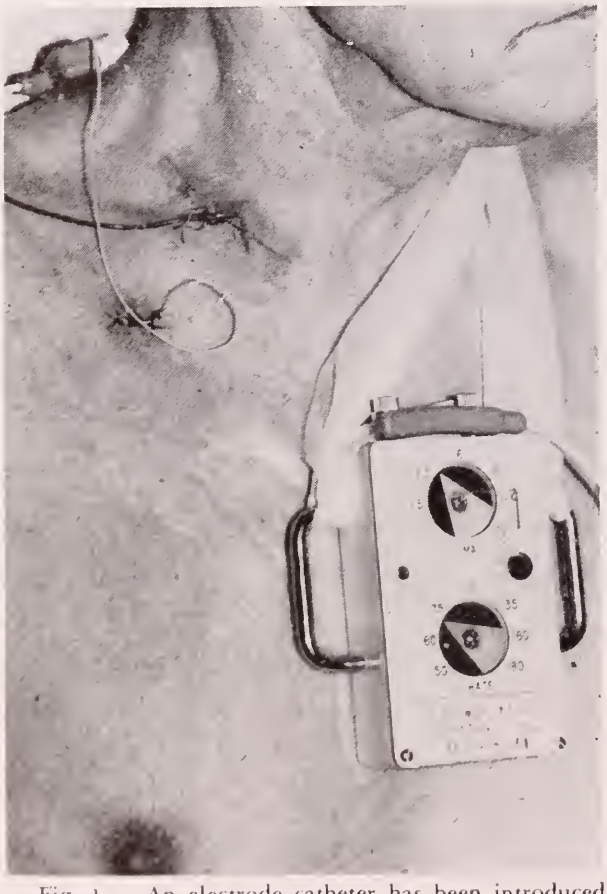


Fig. 1. — An electrode catheter has been introduced into the right ventricle via the external jugular vein. The indifferent electrode is implanted subcutaneously. A transistorized pacemaker is appropriately adjusted.

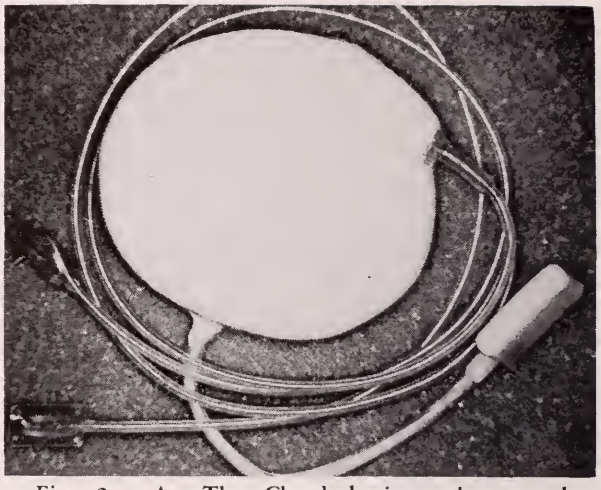


Fig. 2. — A. The Chardack internal pacemaker, illustrating the transistorized battery unit and the coil-spring electrodes. (Manufactured by Medtronic, Minneapolis.)

tion with acute myocardial infarction, continue to have chronic atrioventricular dissociation and a sizable number have Adams-Stokes syncopal attacks. Even those who are not subject to syncope often are severely disabled by the limited cardiac output, and the life expectancy of all of these patients is considerably shortened. Occasionally heart block is seen in conjunction with rheumatic or other inflammatory diseases, or it may be associated with digitalis toxicity. A few cases of congenital heart block are also reported. For practical purposes, however, it is the large group associated with coronary heart disease that warrants our attention.

Surgical Experiences (Table 3)

Our surgical experiences concern five patients, each of whom had coronary heart disease with complete heart block accompanied by Adams-Stokes syncopal attacks. There were four men and one woman, aged 59, 70, 80, 81 and 82 years. Each patient had a fixed idioventricular rate of about 30 beats per minute and each had had multiple syncopal attacks, often associated with convulsions. All were incapacitated by their heart block problems, and none had responded satisfactorily to a medical regimen.

1. External Electric Stimulation.—This was carried out intermittently over a period of several days in two patients. In each instance, although satisfactory control of ventricular rate and relief of symptoms were achieved, the contractions[3] of the musculature of the chest wall were so disturbing and the equipment was so cumbersome that the procedure had to be abandoned.



Fig. 2. — B. Postoperative appearance six months after implantation of internal pacemaker. The transistorized battery unit is implanted in a subcutaneous pouch in the left upper quadrant of the abdomen.



Fig. 3. — Lateral chest x-ray to illustrate position of the coil-spring electrode wires which have been implanted in the left ventricle.

2. Endocardial Stimulation by Electrode Catheter (Figure 1).—Each of our five patients was treated satisfactorily for variable periods of time by endocardial stimulation from an electrode catheter introduced into the right ventricle through an external jugular vein. One patient expired after 14 months of continuous electric stimulation during which time the catheter required frequent manipulation to maintain satisfactory ventricular capture. This patient, aged 80, had severe cerebral vascular and renal disease and was not considered a candidate for implantation of an internal pacemaker. A second patient, aged 59, likewise required frequent catheter manipulation together with replacement of the indifferent electrode which had been extruded. After two and one-half months a retrograde staphylococcal infection developed along the catheter sinus tract together with a secondary bacteremia. They responded promptly to removal of the catheter and intensive antibiotic therapy. Thereafter, the idioventricular rate increased from 28 to about 40 per minute, and the patient no longer experienced syncopal attacks.

A third patient, aged 70, with long-standing complete heart block and frequent syncopal episodes was treated satisfactorily except for wire breakage problems for a period of one month, and conversion was then made to a Chardack internal pacemaker. Two additional patients, aged 81 and 82 years, have been maintained successfully for 12 months on electrode catheter stimulation. Both have had some difficulties from wire breakage and, in both, the indifferent electrode was extruded and required reimplantation. These patients, however, have been gratifyingly rehabilitated and carry on active lives for their ages despite the encumbrance of bandages, wires and holstered transistorized pacemaker units. All of these five patients were maintained on prophylactic anticoagulant therapy. A summary of complications encountered in the employment of electrode catheter stimulation is presented in table 4.

Fortunately, we have not experienced problems of thromboembolism or ventricular perforation and have assiduously avoided using a line-current-operated pacemaker in order to circumvent

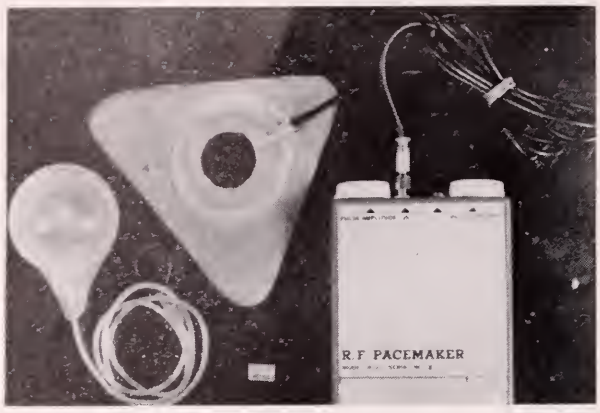


Fig. 4. — Radiofrequency pacemaker unit assembly.

Table 4. — Complications of Endocardial Stimulation by Electrode Catheter (Five Cases)

Loss of endocardial contact requiring manipulation of catheter	2
Extrusion of indifferent electrode	2
Wire breakage problems	3
Sinus tract infection and bacteremia	1

the occurrence of ventricular fibrillation from current leakage.[12,13]

3. Implantation of an Internal Pacemaker (Figures 2 and 3).—In one patient, aged 70, after a one month period of stimulation by an electrode catheter, during which time his cardiac status and general physical condition improved considerably, conversion was made to a Chardack type of totally implanted internal pacemaker. The electrode catheter was employed for control during operation until the second of the two coil spring electrodes of the Chardack unit was implanted into the left ventricular myocardium. At this point, the electrode catheter was disconnected and the subcutaneously implanted transistorized pacemaker provided stimulation at a preset rate of 56 per minute. At present, 18 months following implantation, the pacemaker continues to function well, and the patient is actively about and has experienced no syncopal episodes.

Suggested Plan of Management

Any patient with complete heart block who experiences Adams-Stokes attacks or who is symptomatic because of insufficient cardiac output and who does not respond readily to drug therapy is a candidate for electrical stimulation. Initially, as an emergency measure, particularly in transient heart block associated with myocardial infarction or digitalis toxicity, external electric stimulation by chest wall electrodes should be carried out. Whenever stimulation is required for more than



Fig. 5. — Postoperative appearance following implantation of myocardial electrodes and induction coil and institution of stimulation by radiofrequency transmission.

a few hours, however, it is our belief that an electrode catheter should be employed. This can be introduced into the right ventricle through an external jugular vein under local anesthesia with minimum difficulty and manipulated until good endocardial contact and complete ventricular capture are achieved. It is certainly feasible, particularly in the aged or very poor risk patient, to maintain stimulation by means of the electrode catheter for many months. As we have pointed out, however, there are troublesome difficulties which ultimately arise in almost every instance so that, if long term stimulation is required, it is preferable whenever possible to convert to an internally implanted unit. The electrode catheter provides a highly satisfactory means of maintaining ventricular stimulation until the very moment the internal implantation is accomplished at operation. There are several excellent implantable units available at the present time. Our preference is for the Chardack unit or, if an adjustable rate is desired, the radiofrequency transmission unit developed by Glenn and Mauro[14] (figs. 4 and 5). One of us (T.O.G.), while associated

with Dr. Glenn, had an experience with six such implanted units which proved to function most satisfactorily.

Summary

In summary, the types of available pacemaker devices and the indications for their employment in the management of refractory heart block problems are reviewed. A small series of cases is presented illustrating the range of application of the various devices and their pitfalls. A suggested program of management is outlined in which external electric stimulation is employed only as an emergency measure; conversion to endocardial stimulation by means of an electrode catheter is carried out early, and this, in turn, is supplanted by implantation of an internal unit if long term stimulation is required.

Addendum

Since this article was written, we have implanted internal pacemaker units (Chardack) in four additional patients, in all of whom stimulation was provided at the time of operation by means of electrode catheters. One of these patients, a 79 year old man, made an uneventful recovery following the operation, but shortly after being discharged, suffered a fatal acute myocardial infarction. Each of the other three patients had a benign postoperative course, and the internal pacemaker is currently providing satisfactory regulation.

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Cervical Discography and Electromyography in the Diagnosis of Lacerated or Torn Cervical Disc

Richard E. Strain, M.D.
CORAL GABLES

Cervical spine disorders are increasing rapidly with the increase of speed and accidents in the United States. Very little protection is provided to the cervical spine in most automobile accidents, while the occurrence of neck injuries in approximately 20 per cent of head injuries has led many to adopt routine neck x-rays in many head injuries. Many rear end collisions occur daily. The terms cervical syndrome, whiplash injuries, psychoneurosis, and malingering are frequently applied to patients who, after such an accident, continue to complain of pain in the neck, up the occiput, down the shoulder, into the arm or fingers and between the shoulder blades,[1] while at times, dizziness, headache, facial pains,[2] and even chest pain suggestive of heart trouble are noted.[3,4] Most cervical sprains, when treated conservatively by heat, muscle relaxants, traction, rest and medication for pain, will respond to such therapy, as do other sprains, with relief of symptoms in six to eight weeks.

In those cases in which symptoms persist, more extensive use of cervical discography, a relatively new x-ray diagnostic technique,[1,5-9] plus the use of electromyography,[10] will lead to a more accurate diagnosis with institution of proper treatment. Also, on the part of both physician and patient, a better understanding of the pathological lesion involved will result. Terms such as cervical syndrome, whiplash injury and psychoneurosis, while descriptive, denote a lack of understanding of the pathological lesion on the part of the treating physician, while results of treatment leave much to be desired on the part of the patient under such circumstances.

Smith and Robinson,[1] Cloward,[4] Stuck, Hall and Fralick,[5] Friedenberg, Broder, Edeiken and Spencer,[12] Payne and Spillane[13] and many others have shown "disc degeneration with or without osteophyte formation, subluxation, instability of one cervical vertebra on another or intervertebral disc protrusion is the pathological change usually associated with neck, suprascapular, interscapular, occipital, arm, hand and chest pain from the cervical spine." Others[14-18] have shown the vertebral artery is at times compressed by cervical disc and spine injuries (fig. 1).

Stuck and his associates[5] stated: "Our experience with cases of neck injury has led us to conclude that the cervical intervertebral discs are damaged much more often than has been believed in the past and that many patients with neck injury and a diagnosis of neck sprain actually have one or more symptomatic ruptured cervical intervertebral discs that require excision and spinal fusion. By using the discogram, a relatively new x-ray procedure in the cervical region, we have demonstrated damaged discs in most neck injured patients whose symptoms have not subsided under conservative treatment in a period of three months. Moreover, we have found that anterior disc excision with nerve root decompression and interbody fusion brings relief of these symptoms." Most physicians who have used this new procedure of discography as a diagnostic procedure in the cervical region have become convinced a discogram will show whether a disc is normal, in which instance only a small amount of dye (0.2 to 0.3 cc.) can be injected and this dye stays in the center of the disc in a small elliptical spot easily seen in the x-ray (fig. 2A); in a damaged disc, 0.8 to 1.00 cc. of dye is readily injected and is easily seen going laterally, posteriorly or anteriorly (fig. 2B and fig. 3).

In a damaged disc, this injection will produce the pain of which the patient complains, while in a normal disc, no pain is produced by injection.[7,19] It has been shown anatomically that the

Associate Clinical Professor of Neurosurgery, University of Miami School of Medicine, Miami.
Read before the Florida Medical Association, Eighty-Eighth Annual Meeting, Miami Beach, May 10, 1962.

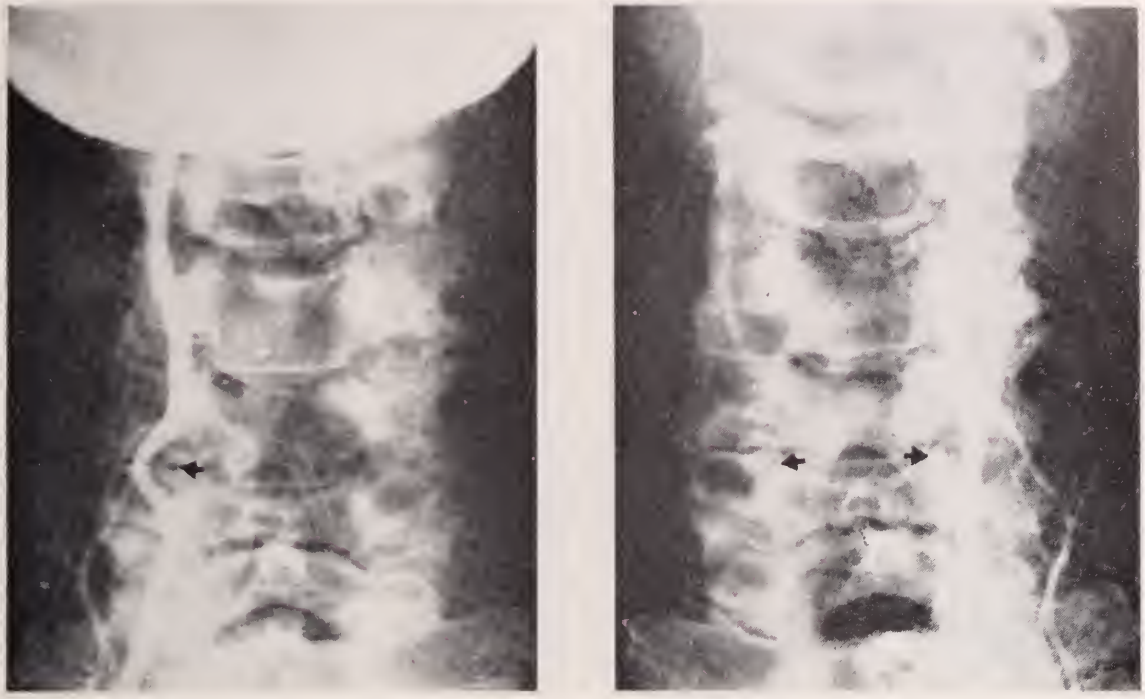


Fig. 1. — Vertebral Artery Insufficiency in Spinal Trauma. (Left) Right vertebral arteriogram shows compression of vertebral artery laterally at C5-C6 level. (Right) Left vertebral artery shows a normal course through the intervertebral foramina. (Reproduced by permission of Schneider, R. C., and Schemm, G. W.,[14] and the Journal of Neurosurgery.)

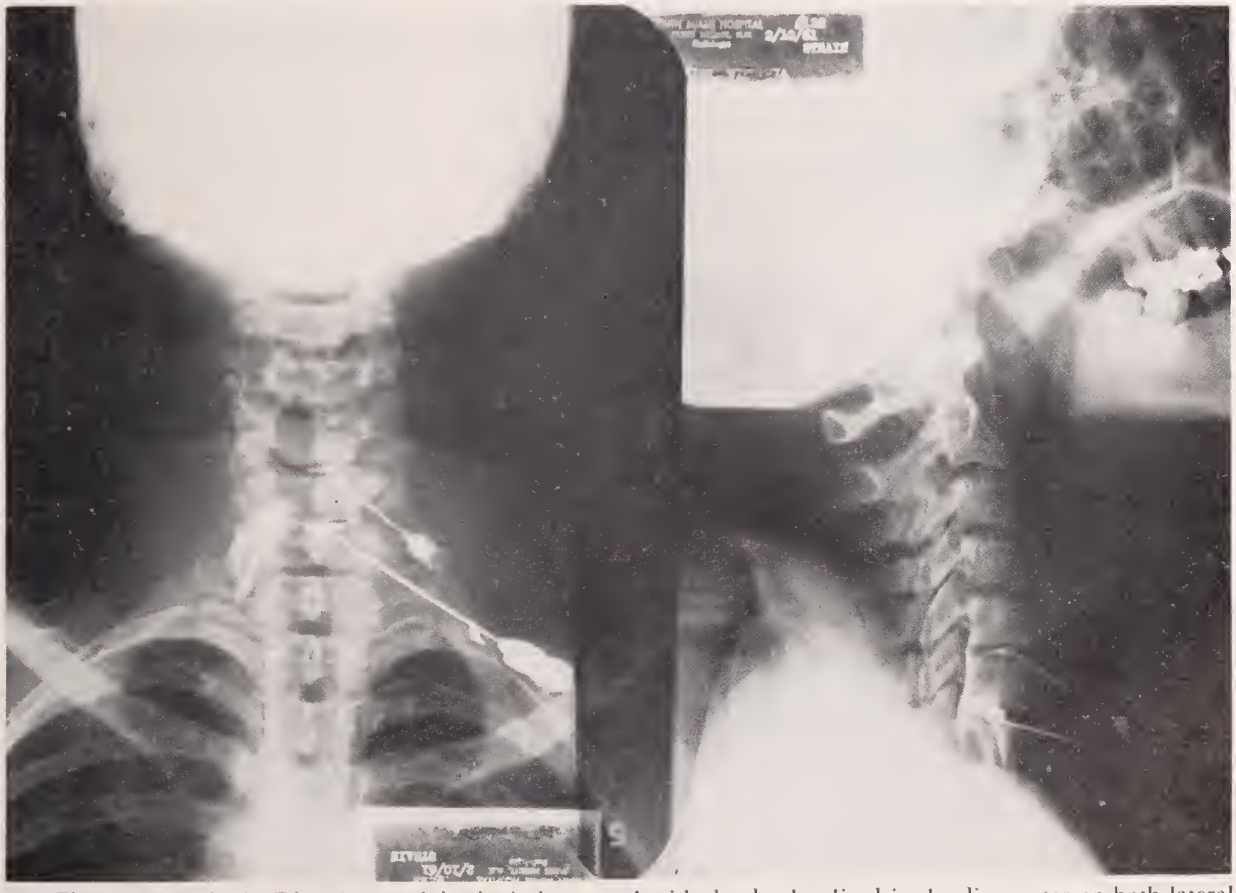


Fig. 2. — A. C5-6. Disc (upper injection) is normal with the dye localized in the disc center on both lateral and anteroposterior views. Injection here was painless. B. C6-7. Disc is abnormal with the dye extravasating posteriorly on the lateral view and extravasating laterally on the anteroposterior view- Injection here reproduced the pain. See figure 3 for close-up of same.



Fig. 3.—A. C5-6. Disc injected—normal. B. C6-7. Disc injected—abnormal.

peripheral fibers of the annulus fibrosus and the longitudinal ligaments that surround it are richly supplied with sensory nerves that subserve the function of pain.[7,11,20]

Cloward[11] stated "Even the slightest motion of a lacerated disk will irritate numerous lacerated nerve endings in the periphery of the disc and ligaments and produce pain." Stimulation experiments in nonanesthetized patients[7] have repeatedly shown that irritation of the anterior surface of a disc refers pain to the scapular area medially while from the posterior surface of a lower cervical disc, pain is referred to the upper segment of the shoulder blade, the base of the neck, the top and point of the shoulder and the upper arm as far as the elbow.

As Schwartz[21] pointed out, however, the cervical nerve roots in all 13 cadavers dissected by him had anastomotic rami running intraspinally from the peripheral portion of the sensory root to the central portion of an adjacent sensory root. These varied from a solitary connection between C5 and C6 to six anastomotic rami involving various roots in two cadavers. He also found one connection in an operative case running from C6 peripherally intraspinally up to C4; so the "normal" pattern of root pain and numbness is subject to marked variation as people simply are not built like a machine which has the same bolt and nut at the same place in every individual. Doctors generally recognize this, but lawyers dealing with cases of this type frequently do not. Individual variation in the anatomy of nerve roots in the cervical region is the rule rather than an exception.

Electromyography will give further confirmatory data regarding the nerve roots involved.[10] Electromyography has been used for many years in research and clinical studies of peripheral nerve and nerve root irritations and injuries, yet its use is still not widely appreciated by the average physician.

A normally innervated muscle at rest is silent, and when voluntarily contracted, gives a specific or normal wave pattern made readily visible on a cathode ray oscilloscope (fig. 4). After 21 days or more have elapsed, a muscle having interference with its nerve supply will show either a fibrillation current at rest when the nerve is degenerated or a polyphasic wave when the nerve is interfered with and the muscle voluntarily contracted. These changes in electrical patterns of muscles are not observed prior to 21 days after a nerve injury; so if a patient is seen before the 21 day period, one can secure a baseline (normal) electromyogram for comparison with the future changes which may develop.

Two illustrative cases demonstrating the use of cervical discography and electromyography in cervical spine disorders are briefly summarized. It should be emphasized that these diagnostic procedures are helpful in deciding which patients may be benefited by anterior discectomy and interbody fusion (fig. 5),[1,3,11] while the myelogram, in many instances, may be normal. Thus, cervical discography will disclose damaged discs which are readily missed by myelography while production of the patient's clinical complaints by the disc injection gives further confirmation that the abnormal disc is producing the symptoms.

Report of Cases

Case 1.—A 33 year old white woman was seen on Feb. 7, 1961, referred by her psychiatrist with the complaint that she had been emotionally upset following a whiplash injury two years previously. Since that time she had had headache, neckache, and aching of the right shoulder and arm. A neurological survey, a myelogram (fig. 6) and an electroencephalogram were reported as giving negative evidence, and she had had psychiatric treatment for her "emotional" troubles and the aching of the right arm, shoulder and neck. The previous day she became emotionally upset, took seven Doriden tablets and was found by her husband lying on the floor and he stated she 'may have hit her head.' She had vomited and she complained of headache, blurred vision and pain in the neck and right shoulder. No legal claims were pending.

Neck motion was limited to 40 degrees bilaterally; vertex pressure gave pain in the neck and right shoulder. Electromyograms on both arms disclosed some polyphasic

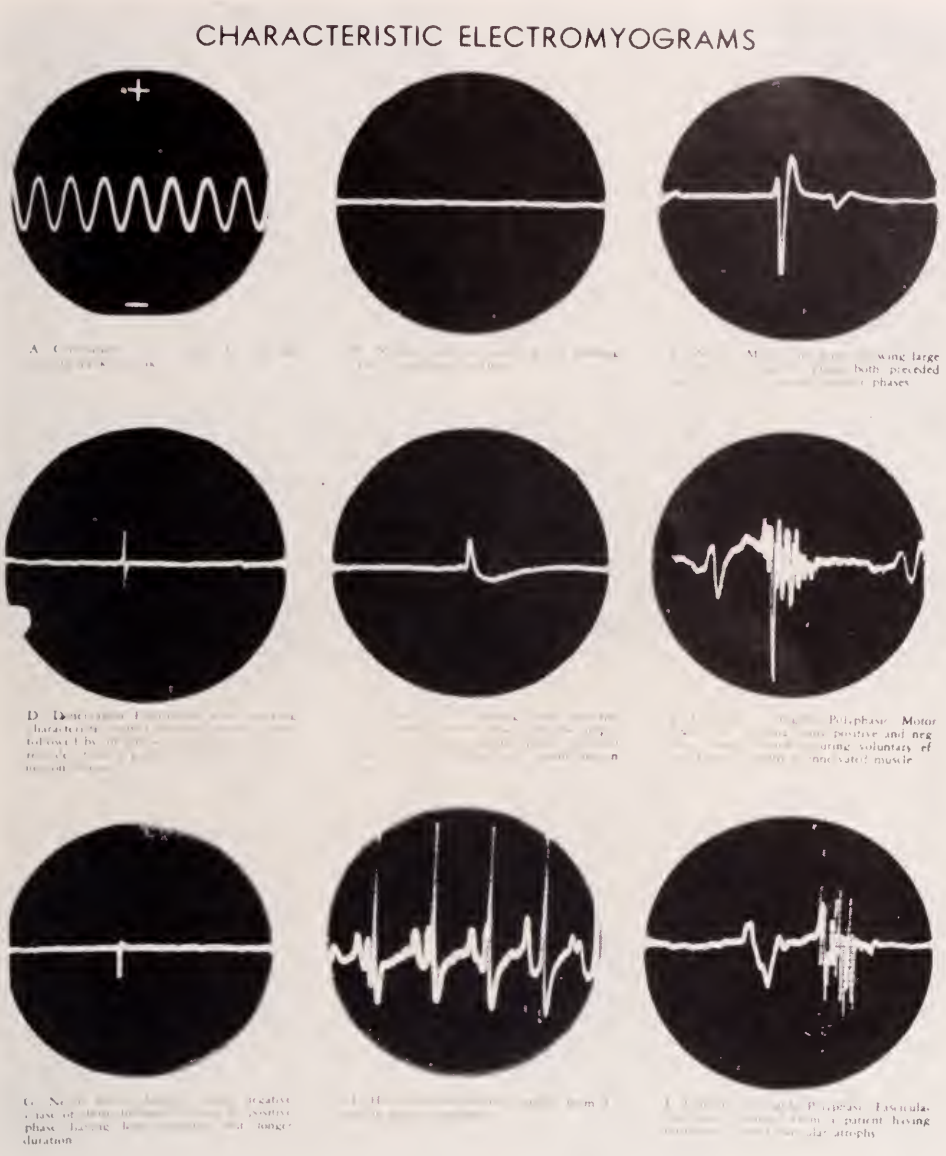


Fig. 4.—Electromyogram. B and C are normal. D, E and F are abnormal because of nerve involvement. G occurs when the needle is on a nerve fibril. H and I occur in muscle disease. (Reproduced by permission of Meditron Company.)

current in the right biceps and triceps. She was admitted to the hospital and after several days' observation had a discogram at C5-6 and C6-7. Injection at C5-6 was normal, taking only 0.3 cc. without pain (fig. 2A). As C6-7 was injected, she screamed, "There's that pain down my right arm I've been taking psychiatric treatment for, for the past year." Injection of 0.8 cc. of dye disclosed an abnormal disc (fig. 2B).

A C6-7 anterior discectomy with interbody fusion was performed on February 12 (fig. 7). She was discharged 12 days later. She has progressively improved and no longer complains of aching of the neck or arm, but still has some emotional instability.

Case 2.—A 54 year old white man was seen on March 13, 1961, because of severe pain in the right arm following an accident five weeks previously, in which he was rendered unconscious, suffered lacerations of the scalp, left rib fractures and a fractured left ankle, and woke up in the hospital where he remained two weeks. He had since been unable to sleep and walked most of the night with pain in the right arm which had become

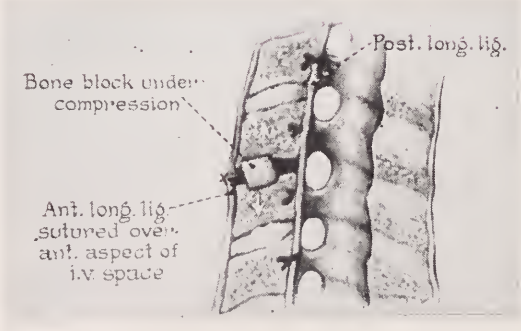


Fig. 5.—Diagram showing the block of bone in place between two cervical vertebral bodies. One will note that the bone block is countersunk below the anterior longitudinal ligament so that the ligament may be resutured over it. (Reproduced by permission of Smith, G. W., and Robinson, R. A.,[1] and the Journal of Bone and Joint Surgery.)



Fig. 6.—Normal x-rays and cervical myelogram obtained eight months previously in case 1.



Fig. 7.—Discogram is normal at C5-6 where disc interspace has markedly degenerated but is not the cause of symptoms. C4-5 is abnormal and causing symptoms. Arrow between C4 and C5 points to dye extravasating posteriorly.

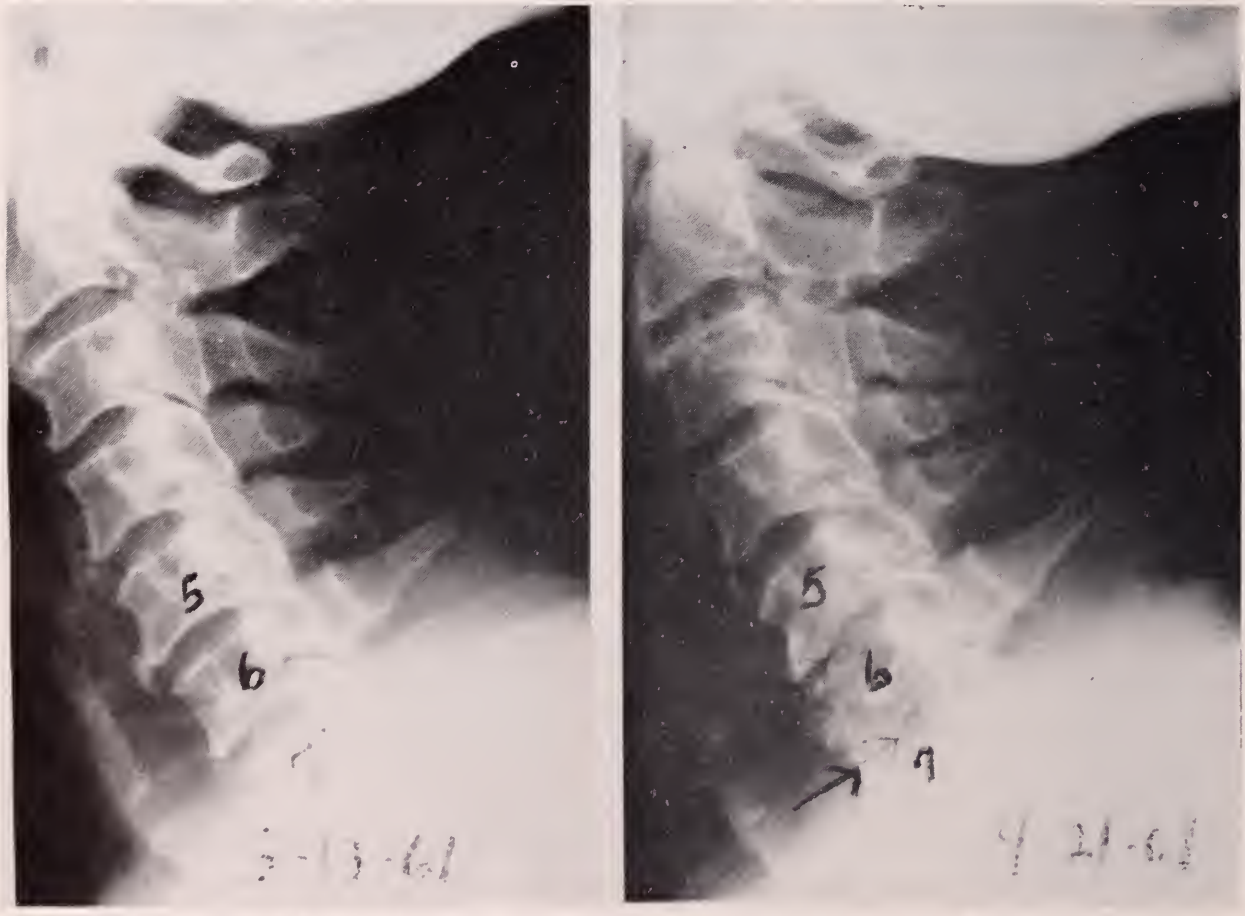


Fig. 8.—Preoperative and postoperative fusion x-rays of cervical spine in case 2.

so weak that he could not take his keys from his pocket. He also had trouble writing. He was a right-handed barber.

X-rays of the right arm and shoulder showed no fracture. He had a below knee cast to the left leg.

On examination, scars of the vertex of the scalp were noted. He moved his neck, being able to touch the left shoulder with the chin, but could turn it only 50 degrees to the right of the midline. His right hand grip and extension-flexion of the wrist and elbow were weak, 1 plus compared to 4 plus on the left. Sensory reaction to touch and pin prick was present. The right triceps reflex was absent; the right biceps reflex was 3 plus and the left 2 plus.

It was thought that he had signs of a C6-7 right cervical radiculitis causing pain and weakness of the right arm. An electromyogram showed polyphasic waves in the right biceps innervated by C5-6, and the right triceps innervated by C7-8. A discogram showed abnormal disc between C5-6 and C6-7, with reproduction of pain. Anterior discectomy with interbody fusion was performed at these two interspaces on March 22, with prompt relief of the severe pain although aching persists in cold weather or when he sleeps on the right arm. Fusion appeared solid by July 20 (fig. 8), and he returned to work as a barber in September. A suggestion of slight interossei atrophy between the right thumb and index finger was first noted in October.

Summary

The average cervical sprain should heal, as do other sprains, in six to eight weeks.

Cervical discography in patients in whom clinical symptoms persist clearly enables one by x-ray to distinguish between normal and abnormal disc.

The production of the patient's clinical complaints by injection of a diseased disc is confirmatory evidence of the cause of his difficulties.

The electromyogram offers further confirmatory evidence of nerve root involvement.

Anterior discectomy and interbody fusion have proved a satisfactory method of relieving the patient's difficulties.

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A shortage in the supply of the February, 1963, issue is preventing The Journal from filling urgent requests from members of the Association.

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Selection of the Patient for Cardiac Surgery

An Internist's Viewpoint

Ralph Slonim, M.D.
MIAMI

From the time of William Withering heart disease has been considered primarily the domain of the internist, and the most effective methods of treatment have been medical. In the last few decades, however, a number of surgical procedures have been devised for palliation or cure of acquired and congenital heart defects. Since cardiac disease, our major killer, is no longer purely medical, we as family doctors have an obligation to seek out patients whose cardiac status may be improved by operation.

We must not assume an arteriosclerotic etiology in every patient over 40 who has heart failure in the face of normal blood pressure. In figure 1 we see the chest x-ray of a 56 year old man who was in congestive heart failure for a number of years. He came into the hands of an alert family doctor who recognized that he had congenital heart disease in spite of the fact that heart failure had made his murmur very quiet. The diagnosis was confirmed by cardiac catheterization, and he underwent repair of congenital pulmonic stenosis with the aid of a heart-lung machine with an excellent result.

Even in the patient with a clear diagnosis of arteriosclerotic heart disease surgical treatment may have much to offer. Figure 2 shows the chest x-ray of a 77 year old man who had a myocardial infarction complicated by heart failure and complete heart block with a ventricular rate of 28. In spite of excellent medical management he had Stokes-Adams attacks each time he rose from the horizontal position. In the roentgenogram are shown the electrodes which were sutured directly to his heart. They were connected to a Chardack pacemaker,[1] a transistorized unit that is buried in the subcutaneous tissue of the abdominal wall. He is now out of heart failure, and quite capable of taking care of all his needs, including his own cooking. In five years he may require a minor surgical procedure for a change of batteries.

From the Department of Medicine, University of Miami School of Medicine. This work was supported in part by grants from the Heart Association of Palm Beach and Martin Counties.

Read before the Florida Medical Association, Eighty-Eighth Annual Meeting, Miami Beach, May 10, 1962.

Basic Principles of Selection

How can we select the patients from our everyday practice who require cardiac surgery? The basic principles are very simple. The candidate for surgery is a patient who has an operable lesion, who is sick enough to need the operation, and who is not too sick to be beyond operative resurrection. Let us consider these three points in more detail.

Since the first requirement is a patient with an operable lesion, we must have a general idea of which lesions are operable. In table 1 are listed many of the congenital cardiac defects which can now be attacked surgically. Table 2 includes a number of acquired lesions amenable to operation. These lists are not complete; new methods are constantly being devised. For example, two years ago the patient with rheumatic mitral insufficiency with a heavily calcified valve was a very poor surgical risk, since there was slight chance of creating a good functional valve in such a case. Today we have available an effective prosthetic mitral valve, a caged ball designed by Albert Starr[2] which can be sutured directly to the mitral annulus after the scarred and calcified leaflets have been excised. In figure 3 we see the chest x-ray of a patient of ours in whom such a valve was inserted. This prosthesis, the culmination of many years of research by a large number of investigators, has immeasurably increased the flexibility of our approach to the surgery of rheumatic heart disease. We expect a constant stream of similar dramatic advances in the future, and it is important that all of us be aware of these advances in order to assure our patients the best available care.

If we are constantly on the alert for operable heart disease in our daily work, we find that the simplest diagnostic tools, a careful history and physical examination, will detect almost every



Fig. 1.—See text for description.

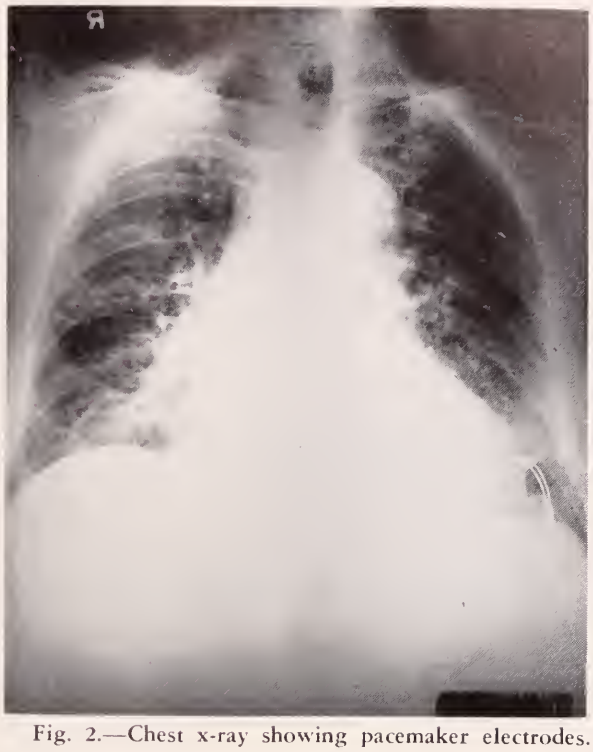


Fig. 2.—Chest x-ray showing pacemaker electrodes.

Table 1.—Partial List of Operable Congenital Cardiac Lesions

Anomalous pulmonary venous drainage—partial and total
Aortic stenosis and its variants
Arteriovenous shunts of the pulmonary, systemic and coronary vessels
Atrial septal defects
Coarctation of the aorta
Endocardial cushion defects (some)
Fallot lesions—trilogy, tetralogy, and pentalogy
Patent ductus arteriosus and aortopulmonary window
Pulmonic stenosis and its variants
Transposition of the great vessels
Tricuspid atresia
Ventricular diverticulum
Ventricular septal defect

Table 2.—Partial List of Operable Acquired Cardiac Lesions

Ball-valve thrombus
Chronic constrictive pericarditis
Complete heart block
Penetrating wounds of the heart
Rheumatic valvular disease
Rupture of the papillary muscle
Rupture of sinus of Valsalva
Tumors of the heart (some)
Valvular insufficiency due to infection
Ventricular aneurysm
Ventricular septal defect



Fig. 3.—Chest x-ray showing prosthetic mitral valve.

potential surgical candidate. Obviously, we cannot expect clinical findings alone to differentiate between such complex lesions as tricuspid atresia and endocardial cushion defects. We can expect, though, that meticulous clinical evaluation will lead to the detection of those patients who do require more complicated studies, such as cineangiocardiography and cardiac catheterization.

Having established the presence of an operable lesion, how can we decide if the patient is sick enough to require cardiac surgery? This decision demands knowledge of the natural history of the

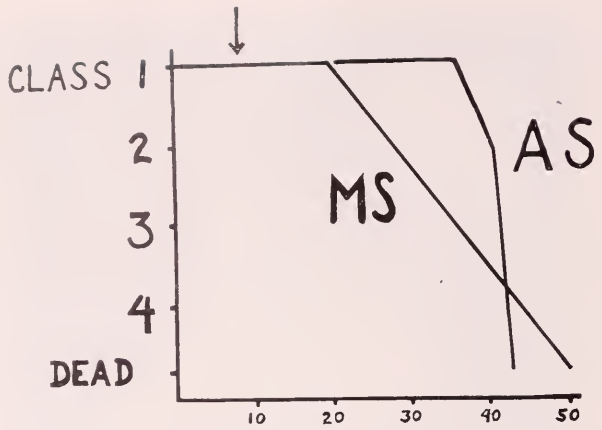


Fig. 4. — Schematic presentation of life history of typical patients with mitral stenosis and aortic stenosis.

lesion in question, and of the risks and probable results of available operations. For example, a patient with a patent ductus arteriosus faces the hazards of heart failure, bacterial endarteritis, and irreversible pulmonary vascular changes. The operation for division of the ductus is safe, and the result is a cure of the disease. The mere presence, therefore, of a patent ductus arteriosus is sufficient justification for the operation. Regrettably, the decision is seldom this clearcut.

To illustrate this point further by an example from acquired heart disease, let us compare the life history of two patients with rheumatic heart disease, one with pure mitral stenosis and one with pure aortic stenosis, as shown diagrammatically in figure 4. The typical patient with mitral stenosis has rheumatic fever in childhood (arrow) and becomes mildly symptomatic relatively early, perhaps in her teens. The symptoms gradually and progressively become more severe. If, however, the unoperated patient is fortunate enough to escape death from such catastrophies as pulmonary edema, embolization and bacterial endocarditis, she may have a gradual downhill course of 20 years or more. The patient with aortic stenosis has quite a different outlook. He often does not have overt rheumatic fever at all, and he may go along for many years with no symptoms at all. The only indications of his disease may be a murmur and perhaps electrocardiographic evidence of left ventricular hypertrophy. After a silent interval that may be as long as 20 years or more, he begins to have symptoms, most often angina, syncope, or increased ease of fatigue, and the chest x-ray begins to show slight cardiac enlargement. Typically, when symptoms have been present three or four years, heart failure appears and heart size increases rapidly. In contrast to the patient with mitral stenosis, the average patient with aortic stenosis in heart failure can look forward to one or two years of life, regardless of how well any particular episode of failure responds to medical management.

At present the operative risk for mitral commissurotomy is low, on the order of that for cholecystectomy, and results of surgery generally are good even in severely symptomatic patients, or in those who have had embolic episodes. Even with severe pulmonary hypertension the average patient does better with surgical than with medical treatment.

In contrast, the risk of surgery in aortic stenosis is relatively high, on the order of that for total gastrectomy. The results of surgery are generally good, but are often disappointing in patients with very large hearts or those who have had prolonged heart failure.

Putting together this information about the natural history of these two defects and the results and risks of surgery, we can compare the principles of case selection for the two operations. For the patient with dynamically significant pure mitral stenosis, availability of a low risk operation with the likelihood of a good result leads us to recommend surgery whenever the diagnosis is made. The very gradual downhill course of most of these patients, however, suggests that surgery may, if necessary, be delayed for months or even years with relative safety, even though prolonged delay may entail a certain amount of hazard and a slightly greater operative risk.

In the case of aortic stenosis the problem is different. Because of the higher risk of surgery in this disease, the patient in the asymptomatic part of his course is better left unoperated. An exception is the asymptomatic patient in whom cardiac catheterization demonstrates a high degree of valvular obstruction. The rapid development of the devolutionary pattern, however, and the relatively poorer surgical results in very late cases lead to the recommendation of prompt surgery as soon as symptoms appear. It is most important to bear in mind that the patient with aortic stenosis who is just beginning to have angina or syncope is a sick man at a late stage of his disease, even though he often looks superficially well. He is the man who surprises us by dropping dead on the street. He needs surgical help promptly. If he has been in heart failure, his surgical risk will be greater, but if left unoperated his outlook is bleak indeed.

We have digressed about the principles of detection of the patient sick enough to require surgery. What about the patient too sick for operation? How can we identify him? In every kind of surgical heart disease eventually the unoperated patient will reach an end stage where the most expertly performed operation can no longer help. It is often difficult to decide when such a stage has been reached, and criteria vary with the lesion involved. In general, heart failure intractable to good medical management means that surgery should not be recommended. There are a few exceptions to this rule, for example, chronic constrictive pericarditis, traumatic ventricular septal defect, ventricular aneurysm, and rupture of a sinus of Valsalva into a cardiac chamber. Patients in whom a left-to-right shunt has reversed are not usually helped by operation. There are several general contraindications to surgery which apply to all kinds of cardiac lesions, including thyrotoxicosis, an active source of gastrointestinal bleeding, bacterial endocarditis, rheumatic fever, and associated incurable disease with a short prognosis. Pregnancy and advanced age are not per se contraindications.

Summary

Management of heart disease is no longer exclusively medical. Cardiac surgery has blossomed miraculously in the last few decades. As family doctors we are obligated to know which lesions are amenable to surgical cure or palliation, and to seek out patients with such lesions. When clinical evaluation gives insufficient information to decide whether an operable lesion is present, or to decide whether the patient with an operable lesion is sick enough, but not too sick, for surgery, we must know when to seek additional information through special studies.

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2700 Southwest Third Avenue.

The What, Why or How of "Doctor's Day"

'Way back in 1933 a lovely lady, a doctor's wife, Mrs. C. B. Almond by name, thought that it was about time for our hard working medicos to reap a small portion of their just rewards—and so the idea of "Doctor's Day" was conceived.

The birth of this brainchild occurred in the form of a resolution presented to the Woman's Auxiliary to the American Medical Association in 1934, and it was christened in 1935 by the Woman's Auxiliary to the Southern Medical Association. Today, on March 30, almost every state Auxiliary in the nation celebrates this anniversary.

This date was chosen because on March 30, 1842, a great step forward in the history of medicine was made—the use of ether as anesthesia for surgery by Dr. Crawford W. Long.

The red carnation, a symbol of courage, became the official flower and is used in decorations and presented to doctors as tokens of gratitude and affection. "Doctor's Day" is celebrated in as many ways as there are auxiliaries in our nation, but the primary purpose has always been to honor our physicians, both living and dead. Each state Auxiliary chooses its own method of observance. Whether it be in the form of a special gift to some health group, education foundation, medical school or hospital—the basic idea is uniform. County auxiliaries participate by having social functions stressing fun and friendship and the personal touch which always adds to the enjoyment. In publicity, we all know that the use of tact and good taste makes for better public relations and as always that is our goal.

For those who didn't know the What, Why, or How of "Doctor's Day," this little "capsule" is presented.

Mrs. Philip L. Smoak, Doctor's Day Chairman
Woman's Auxiliary, Florida Medical Association

Clinicopathological Conference

Southeast Florida Tuberculosis Hospital

Maurice Kovnat, M.D., Senior Staff Physician, Southeast Florida Tuberculosis Hospital, Lantana.
Asher Marks, M.D., Chief, Pulmonary Physiology, Jackson Memorial Hospital, University of Miami School of Medicine, Miami, and Consultant in Pulmonary Physiology, Southeast Florida Tuberculosis Hospital.
William M. Germain, M.D., Associate Professor of Pathology, University of Miami School of Medicine, Miami, and Consultant in Pathology, Southeast Florida Tuberculosis Hospital.

DR. MAURICE KOVNAT: A Negro youth, aged 19, was admitted for the first time to this hospital on Dec. 19, 1960 and expired June 4, 1961.

During the course of a periodic examination at the County Chest Clinic, an abnormal chest x-ray was found, and he was admitted to the Chest Unit of the Jackson Memorial Hospital on Dec. 1, 1960 (fig. 1). His two sisters had been treated in this hospital for tuberculosis.

On his admission to Jackson Memorial Hospital, it was recorded that he had had frequent chest colds during the past year. He also complained of weakness, loss in weight and a severe hacking cough, productive of white to yellowish sputum. He felt feverish at times, but did not know whether he actually had an elevation of temperature. After extensive investigation at that institution, he was transferred to the Southeast Florida Tuberculosis Hospital with the diagnosis of pulmonary tuberculosis, moderately advanced, activity undetermined.

When he was admitted to this hospital, the physical examination revealed a well developed, but slightly built, Negro man weighing 99 pounds with height of 5 feet 6 inches. He appeared to be in no acute distress. The blood pressure was 108/50 mm. Hg. Examination of the chest revealed scattered, fine rales posteriorly in the upper halves of the lungs. The cardiac pulmonary second sound was accentuated, and there was a grade I systolic murmur at the apex. The admission x-ray revealed rather light infiltrative changes in the upper half of each lung with a widening of the mediastinal shadow, particularly on the left side. There was displacement of the trachea to the right. Both diaphragms appeared elevated. The white blood cell count was 5,850 per cubic millimeter with a normal differential. The hemoglobin estimation was 14.5 Gm. per hundred cubic centimeters and the hematocrit reading 48 per cent.

A diagnosis was made of pulmonary tuberculosis, far advanced and active, and the patient was treated with INAH 300 mg. daily, PAS 12 Gm. daily, and streptomycin 1 Gm. daily.

It was obvious from the start that this case had many atypical features. Skin tests for tuberculin sensitivity, intermediate and second strength, gave negative results. Skin tests for fungi, including those causing blastomycosis, coccidioidomycosis and histoplasmosis, also gave negative results. Intensive sputum studies by smear and culture failed to reveal acid-fast organisms.

Clinically, the patient showed retrogression with continued loss in weight in spite of intensive antituberculosis chemotherapy. Steroid therapy was started on Jan. 9, 1961. After initial slight improvement, urther deterioration soon set in. There was an increase in the troublesome, dry cough, with progressive shortness of breath, anorexia, and loss in weight. Cyanosis, clubbing of the fingers, and enlargement of the liver were not noted. Repeated x-ray examination of the chest revealed slow progression of the irregular changes with an increase of the mediastinal shadows. The illness ran an afebrile course except for a temperature of 100 F. on March 2, and a subfebrile period for four days on May 11 to May 15. The pulse rate on admission was 80, and the respirations were 22. Subsequently, the pulse rate rose to 120 during the same brief febrile period. The respiratory rate remained around 20 per minute until the last month of the illness, when it gradually rose and reached 34 per minute during the last days of the illness.

Other studies included the following: The hemoglobin estimation was 14.5 Gm. per hundred

cubic centimeters, the hematocrit reading 48 per cent, and the white blood cell count 5,850 per cubic millimeter with 1 per cent stab forms, 59 per cent segmented forms, 31 per cent lymphocytes, 3 per cent monocytes, 5 per cent eosinophils and 1 per cent basophils. On March 3 the white blood cell count was 11,100 with 77 per cent segmented forms, 20 per cent lymphocytes, 1 per cent monocytes and 1 per cent basophils. The total serum protein was 8.8 mg. per hundred cubic centimeters with albumin 5.4 Gm. and globulin 3.4 Gm. The blood calcium was 5.7 Gm. Sickle cell studies gave negative results as did stool examinations for parasites. Repeat serum protein examination as of May 17 showed albumin 4.9 Gm. and globulin 4.1 Gm.

Bilateral scalene node biopsies were reported as reactive hyperplasia. A muscle biopsy was reported as negative.

Bronchograms revealed bronchiectatic changes in both upper lobes.

Except for a slight remission with a second course of steroid therapy, the symptoms of cough, shortness of breath, anorexia and weakness became progressively more severe. Subsequent chest films revealed an increase in the pulmonary and mediastinal densities. On May 17 (fig. 2) a spontaneous left pneumothorax developed, which receded with re-expansion of the lung two days later, but recurred again on May 31, necessitating thoracotomy and tube drainage on June 1. Good re-expansion followed this procedure, with no evidence of further air leaks. On June 4 the condition of the patient suddenly deteriorated, and after a brief period of severe respiratory distress, he expired.



Figure 1

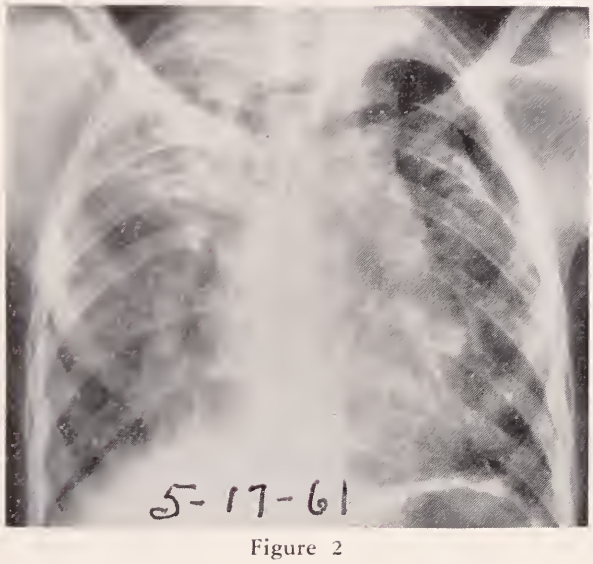


Figure 2

Clinical Discussion

Dr. Asher Marks: Whether or not this patient had active pulmonary tuberculosis some time in the past is difficult to say. Certainly we have not established this disease process as tuberculosis. His x-ray films are abnormal. The cardiac silhouette is unusual in that the heart appears to be enlarged. I cannot definitely say which chambers are enlarged. In addition, there is a fuzziness of outline of the cardiac shadow which is most in keeping with a fibrotic involvement in the mediastinum or with enlarged lymph nodes. I find it difficult to explain the fact that this young man had a high hematocrit reading, repeated several times, and reported as being 48 per cent. This is somewhat above normal, epsecially in a Negro male, and especially in a person who seems to be having progressive inflammatory disease. In addition, he had maintained a normal serum albumin and had an elevated serum globulin. Hyperglobulinemia is associated with some specific diseases. In a young Negro male who had pulmonary and perhaps other pathologic changes, we would have to include sarcoid as being a primary consideration. Yet, Dr. Kovnat reported that the gamma globulin was normal, and this finding would be somewhat unusual. Sarcoidosis may produce a characteristic electrophoretic pattern. In addition, he had not a high, but actually a low blood calcium. This would be against sarcoidosis as would the two negative scalene node biopsies.

Criticism could be leveled at a diagnosis of Hodgkin's disease or any lymphoma which could arise in the mediastinum and which could involve pulmonary parenchyma. The afebrile course and the absence of anemia mitigate against lymphoma.

There was some eosinophilia, which is present in only about 20 per cent of patients with lymphoma. Another finding which disturbed me was the accentuated pulmonic second sound and a grade I systolic murmur. It appeared that the clinician was trying to describe pulmonary hypertension, and I wish that an electrocardiogram had been obtained. It is said that the patient was not cyanotic, but in a Negro it may be difficult to tell. The fact that he had bronchiectasis means to me only that the disease had been there for a long period of time. I do not think this was a primary bronchiectasis, but rather that he had sufficient scarring from whatever started this disease to have produced distortion of the bronchi. He had no hemoptysis, sweats or purulent sputum over a long period of time to go along with clinically significant bronchiectasis.

I believe mycotic disease has been eliminated by repeated sputum examinations and the negative results of skin tests. He probably did have pulmonary hypertension, and the dyspnea may well have been related to the pulmonary hypertension, perhaps secondary to a loss of alveolar capillary bed due to scarring. So, in essence, I am left with a feeling that he had pulmonary fibrosis without being able to pinpoint a specific etiology.

I could only conjecture about the terminal event, whether a massive pneumothorax developed on the other side, or whether the tube was plugged and a tension pneumothorax had developed. These all sound rather improbable in the very short space of time. Another possibility is that he had either a pulmonary thrombosis or a pulmonary embolus which might explain the very rapid demise.

I would summarize by saying that I do not think he had pulmonary tuberculosis, at least, not active. I cannot rule out pulmonary mycotic disease, although I think it is unlikely. My primary diagnosis in this young man is that he had pulmonary fibrosis, perhaps secondary to some previous inflammatory disease which was no longer active, and that pulmonary hypertension developed and perhaps an element of cor pulmonale. This explains the dyspnea, and he died with cardiorespiratory insufficiency due to the progress of this process. I would favor diffuse pulmonary fibrosis of unknown etiology, with alveolar capillary block syndrome manifested by pulmonary hypertension and hypoxia with secondary polycythemia. The terminal event might be either pulmonary thrombosis or embolism or recurrent massive pneumothorax

The Autopsy

Dr. William M. Germain: The external inspection of the body in this case revealed little of interest. The drainage tube had been removed from the upper left side of the thorax. The important pathologic changes were limited to the thorax.

The heart weighed 255 Gm., and the only significant alteration was a moderate degree of myocardial hypertrophy involving the right ventricle. This could be consistent with the clinical manifestations of cor pulmonale of moderate degree. Both lungs completely filled the thoracic cavity, without free fluid, and with no evidence of pneumothorax. They were covered over their entire surface with a thin layer of fibrin. This fibrin became more abundant over the lateral and superior surface of the left superior lobe where it had been associated with previous drainage of a pneumothorax. There were no old, dense adhesions, and both lungs were removed without difficulty from the thoracic cage. The right lung weighed 550 Gm., and the left 390 Gm. The appearance of both lungs was identical, and on dissection they were uniformly and diffusely involved by an infiltrative process, of inflammatory type, which in some areas presented consolidation and in others resembled hepatization. Frothy fluid could be expressed from the bronchial tree of both lungs. There was no evidence of purulent exudate, either in the pleural cavity or in the bronchi. The inflammatory process was diffuse; there were no visible isolated lesions to suggest tuberculosis, and no evidence of cavitation was present. There was no evidence of neoplasm. The bronchial tree was congested, but otherwise noncontributory.

The bronchial, hilar and mediastinal lymph nodes were numerous and enlarged. They varied in size from 5 mm. to 2½ cm. in diameter. They showed edema, but no recognizable lesions, and no calcified lesions were demonstrated in either the lymph glands or the lungs, which might be consistent with a primary tuberculous lesion. Microscopic sections of the lungs showed a widespread and diffuse inflammatory process, in which fibrosis was a conspicuous finding. Fibrosis involved the pleura, the peribronchial structures, and especially the pulmonary framework with marked interstitial connective tissue proliferation. The process showed no evidence of tuberculosis, was not pyogenic, and there was no evidence of mycotic etiology. No specific pattern of the fibrosis was noted. The fibrosis had a tendency to dis-

tort and reduce the pulmonary alveoli in some areas to the point of complete obliteration. The alveolar lining cells in many places were enlarged and hydropic, and the alveolar spaces contained many exfoliated alveolar cells and macrophages, some of which were loaded with hemic pigment. In areas where the process was more acute, there were focal hemorrhages and exudation of macrophages, and a few lymphocytes. Eosinophils in this case were not conspicuous. Dependent areas of the lungs showed edema, probably of late origin.

Pathologic Discussion and Final Diagnosis

The important pathologic lesion in this case is pulmonary fibrosis (fig. 3, x 109). This fibrosis involves both lungs diffusely and uniformly. It is conspicuous for the involvement of the pulmonary framework. It is also conspicuous for the absence of a pattern which might identify its etiology. Thus, many agents capable of producing pulmonary fibrosis can be excluded. Tuberculosis, mycotic disease, neoplastic diseases and Hodgkin's disease have been excluded. Bacterial infection was not present. Viral etiology can be suspected, but not proved. The pathologic anatomical diagnosis in this case could be summarized as progressive interstitial pneumonitis with progressive pulmonary fibrosis.

These pathologic findings might fit into the category known as idiopathic pulmonary fibrosis, but here again, we are merely saying pulmonary fibrosis of unknown etiology. Or, again, many of the findings in this case are listed under the so-called Hamman-Rich syndrome whose most conspicuous pathologic change is pulmonary fibrosis, but here again, we are dealing with the pattern of diffuse fibrosis with unidentified etiology.

Dr. Benjamin L. Brock: Peabody and his associates[1] reported the occurrence of this condition in identical twins. In a discussion of their paper I stated that the variations in the clinical and pathologic findings are probably due to different degrees of cellular activity. In some cases a fatal outcome might have been avoided by the early use of antibiotics such as Chloromycetin and Aureomycin, in which case the true nature of the disease may never be determined.

Summary and Conclusion

Dr. Kovnat: A young Negro male after a progressive nine month illness, characterized by shortness of breath, weakness and loss in weight and complicated by partial spontaneous pneumothorax, presents on postmortem anatomical evidence of diffuse interstitial pulmonary fibrosis.

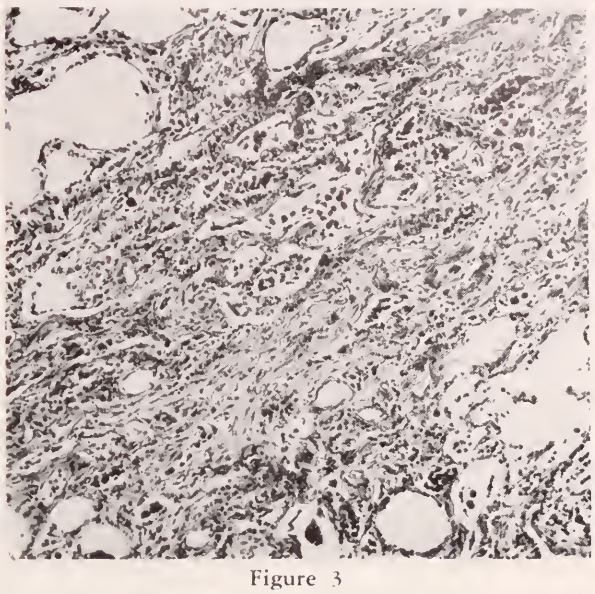


Figure 3

Hamman and Rich[2] described four similar cases in 1944, and since then numerous authorities[3-6] in both texts and periodicals have continued to report such cases under this euphemism. Priority for this "syndrome," however, is claimed for Rindfleisch,[7,8] who called attention to this condition under the title "Cirrhosis of the Lungs" in 1899. Von Hansemann[9] reported a similar case in 1915 under the title "Lymphangitis Reticularis." The wide variation in the clinical picture, roentgen findings and anatomical description, and the lack of a specific etiological factor cast doubts on the wisdom of grouping such cases into a distinct entity. For the present, it is more logical to label them as idiopathic diffuse pulmonary fibrosis. It is the consensus of most investigators that the etiology is probably on a viral basis akin to the atypical pneumonias. More investigation, however, is necessary before we can consider the condition worthy of a specific title.

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Gastric Ulcer as a Complication of Duodenal Ulcer

In the past decade it has become clear that duodenal ulcer and gastric ulcer are separate diseases. Differences in the age and sex incidence are well known. Their response to surgical treatment is striking in that marginal ulcer is frequent after surgery for duodenal ulcer and almost never occurs after partial gastrectomy for gastric ulcer. Dragstedt pointed out the great difference in the functional state of the stomach in the two diseases. The stomach of the duodenal ulcer patient is hypersecretory and hypermotile, whereas gastric secretion is depressed below normal levels in gastric ulcer patients and gastric retention is often present. He theorized that, whereas duodenal ulcer is dependent for its genesis upon neurogenic (vagal) gastric hypersecretion, gastric ulcer is related to hyperfunction of the pyloric antrum and its powerful secretory hormone, gastrin. While vagotomy is the most important factor in the surgical treatment of duodenal ulcer, resection of the pyloric antrum is the essential step when one is operating for gastric ulcer.

A small but significant number of patients (estimated at 20 per cent) with gastric ulcer have an active or healed duodenal ulcer. The following case is a typical example.

A 35 year old white male salesman was seen in the University of Florida Clinic on April 5, 1962. Seven years prior to admission, the patient noted the onset of burning epigastric pain coming on two hours after meals and at night, promptly relieved by antacids. Six months after onset, he had hematemesis and melena requiring blood transfusion. He continued to have periods of distress, and duodenal ulcer was diagnosed by x-ray in 1958. In 1960 a severe exacerbation culminated in perforation plicated at laparotomy. In December 1961, the patient's distress became much more persistent, not closely related to meals, and not relieved by food or alkali. He was forced to discontinue working and lost 10 pounds in weight.

X-ray examination disclosed a large crater high on the lesser curvature of the stomach and a severe deformity of the duodenal bulb with stenosis. Basal gastric analysis revealed an hourly hydrochloric acid output of 8.8 mEq.

On April 18, 1962, a vagotomy, pyloroplasty, and temporary gastrostomy were performed. The maximum lumen through the pylorus was 3 mm. On the ninth postoperative day, upper gastrointestinal x-ray revealed complete healing of the gastric ulcer. Three months postoperatively x-ray again revealed no evidence of the gastric ulcer, and the stomach emptied normally. Basal gastric analysis revealed an hourly hydrochloric acid output of 0.1 mEq. Nine months after the operation the patient had regained his normal weight and was entirely asymptomatic.

Although coexistence of duodenal and gastric ulcer has long been recognized, the importance of pyloric stenosis has recently come to light . In 1955, Dragstedt demonstrated that experimental pyloric stenosis increased gastric secretion in animals and caused gastric ulceration. The narrowed outlet results in gastric retention with exaggerated stimulation of the antrum producing increased acid secretion through the hormone, gastrin. Patients with this syndrome also have basal hypersecretion of gastric juice characteristic of the duodenal ulcer diathesis. Treatment of these patients by conservative gastric resection as for the usual gastric ulcer would often be followed by marginal ulceration. It is imperative in these cases, therefore, that both the neurogenic and the hormonal hyperfunction be corrected. In the case presented, neurogenic hypersecretion was ablated by vagotomy while antral hyperfunction was corrected by pyloroplasty permitting adequate gastric emptying.

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Professor and Head, Department of Surgery
University of Florida College of Medicine
Gainesville

President's Page

"A Good Wife Who Can Find?"

A good wife who can find?
She is far more precious than jewels.
The heart of her husband trusts in her, and he
will have no lack of gain.
She does him good, and not harm, all
the days of her life.
She seeks wool and flax, and works with willing hands. . . .
She rises while it is yet night and provides food
for her household and tasks for her maidens. . . .
She opens her hand to the poor, and reaches out
her hands to the needy. . . .
She opens her mouth with wisdom, and the teaching
of kindness is on her tongue.
She looks well to the ways of her household, and does
not eat the bread of idleness. . . .
Give her of the fruit of her hands, and let her works praise
her in the gates.

Times have changed somewhat, and with them the duties of a good wife, in the several millenia since Lemuel wrote these words of the Thirty-first Proverb; yet, who can better describe a good wife? It is apparent from the Proverb that King Lemuel found the good wife. So did I. And from what I have seen of the activities of our Woman's Auxiliary, so did most of the doctors of Florida. Whether it be seeking wool and flax, seeking a field and buying it, being a Cub Scout den mother, or working in the interest of her husband's profession as a member of the medical auxiliary, it is still the good wife at work "with willing hands." It is in compliance with the Biblical injunction to "let her works praise her in the gates" that this is written.

I do not suppose that I am different from any other man in that I have long since become accustomed to expecting the impossible from my wife. This is not unnatural because time and again my expectations are fulfilled. Yet, again I believe that I am only normal in that I am often amazed at the collective accomplishments of our wives. I have had the opportunity to see at work the Woman's Auxiliary to my own county medical society for a number of years and more recently the Auxiliary to the Florida Medical Association. Strangely enough, these ladies have only one thing in common: They are all married to doctors. But what a bond! The dedication, the purpose, the zeal with which they undertake projects in the interest of their husbands' profession should be an inspiration to these self-same husbands if only they knew of all of the Auxiliary's activities. Occasionally, one of my friends will commiserate with me because of the demands on time and energy which the office of the presidency of the Florida Medical Association makes upon its holder. After looking over the projected activities for this year of Mrs. Edward Ludwig, President of the Woman's Auxiliary to the Florida Medical Association, I felt confident that I had the easier job.

In an old New England cemetery, there is a gravemarker with an epitaph which reads: "Here lies Maude Jenkins. She was ————————. Words cannot describe what she was, but just imagine all that a wife and mother ought to be. She was all that, and more." I think it is more appropriate that we put it on paper rather than to wait for the marble. So, for myself and for you I would like to tell Mrs. Ludwig and the ladies of the Auxiliary, our wives, that we appreciate all they individually and collectively do for us and that we do not think that the Proverbial wife could show them a thing. Bless them all.

Robert E. Gellenthien



Editorials

Fee Schedule for True Specialists

Every so often, in discussions of standard fees for compensation cases, someone brings up the proposal of having a fee schedule for specialists and a separate one for general practitioners. This never gets far; it does not even get discussed to the degree that it deserves. A large number of doctors, probably a majority, would fight such an idea tooth and nail.

Yet, when I get an undisplaced fracture of the radius and I spend a small amount of time and skill on it, I receive the same fee allowed to the orthopedic specialist in compensation for his attentions to the mean, unstable fracture which I pass on to him. In short, I screen out the very "profitable" cases and throw to the specialist only the ones that are less profitable. This screening applies to many other kinds of cases as well, and is a factor in noncompensation case problems, too. This is wrong on the face of it, but a majority of doctors will fight strongly to preserve it. I will, too.

Why is this true? You will get a variety of pat answers from various doctors, but the answer boils down to this: competition. Competition between generalists and specialists? This seems paradoxical. Specialists are supposed to be specially trained to take care of problem cases. Are the general practitioners competing with the specialists for these problem cases? Essentially all such cases are referred to a specialist by the general practitioner who encounters them. So the general practitioner is not competing for the specialist's cases.

No, the specialist is competing with the general practitioner for the general practitioner's cases. As long as this is true, the specialist is going to have to accept the general practitioner level fee schedule.

There is no apparent way in which a valid line can be drawn between cases; so we must find a way to draw a line between doctors. An effort has been made to use board specialization as a distinction. This could be a valid line if the board man were not competing with the general practitioner.

For present purposes we must therefore refer to specialists as those who treat only patients referred by some other physician. This was the original intent of specialization, anyway. Instead, it has blossomed into a method of partitioning the anatomy or the physiology of the living human being. This method permits a man to stick to one narrow line of work, but he must do minor activities as well as the major activities in that particular line of work. This is proscription rather than specialism.

The office sign or the calling card of a pediatrician often reads "Joe Blank, M.D., Practice Limited to Diseases of Children." This is a much more honest way of expressing it than to say "Joe Blank, Child Specialist." He admits that he treats the common cold and pink eye and scurvy. He does not ask for special problems. He merely puts an age limit on his practice.

"James Smith, M.D., Ear, Nose, and Throat." This doctor will treat a patient who walks in complaining of a cold, Bell's palsy, or a pimple on the nose; he will perform a tonsillectomy or bronchoscopy, or cauterize a wart on the chin, regardless of the degree of seriousness. All the patient has to do is to walk into his office, or summon him to his home by telephone. This man is not truly specializing in problems; he is simply limiting himself away from the rest of the body. He is a limitist, not a specialist. He is not providing a special function; he is simply providing a limited function. Any doctor who treats any patient who simply walks in his door can scarcely call himself a true specialist.

Where does this get us?

This is the mold that medical training in this country has followed. It is possible that this mold should be changed; or perhaps this trend toward

very narrow limitation is a good thing; but that is another matter.

The point of discussion is to recognize the facts of our present situation in relation to fee schedules. In this concept the specialists are those who engage in a referral practice only. A doctor of this type should have no fee schedule. Every case that he takes may be very simple or extremely complicated, but on the face of it, being referred by another doctor, it is too unpredictable to fit into a standard. To try to establish a fee schedule for this kind of service would be silly; each case must be charged on its merits.

This is a useful concept from several standpoints, but it is specifically applicable in the case of compensation problems. Every good specialist will enthusiastically support such an idea, and no good generalist can have any valid objection.

Florida Academy of General Practice
Willard E. Manry Jr., M.D.
Lake Wales

The Magic of Numbers

Even the very young are fascinated by numbers. A major childhood achievement is to say "I'm three." Later the child proudly learns the multiplication table and still later logarithms and the slide rule. And finally, he modestly designs a computer, or calculates correctly the amount of energy required to move a mountain, or with great satisfaction, spends his working hours figuring out relationships between things. Most of his thinking is numerical.

As adults our social life (a 9-1 Martini, please), our social security (106-282-938), our car, our boat, our plane, our house, all require numbers. There is a number on our license to work, to play, to travel, to hunt, to stand in line to buy meat; when we go to prison, when we join the Army, we are given a number. We are not permitted, in short, to be born, to live or to die without a number. When we do pass on to better things, our tombstone is inscribed, in part, MCML.

Numbers thus are familiar; they are comfortable, friendly, satisfying; so we need them and use them, in the practice of medicine. We speak of the patient in bed 3, ward 12 with an LDH of 650; we record dutifully under numerical headings our finding in Autopsy #1103 or surgical #5621-620.

Laboratory medicine is of course oriented toward mathematics. It flowers among the glories of numbers. An uptake of 18 per cent and a PBI of 7.2. A "ceph floc" of 4 plus and a Wassermann reaction of the same figure. We cannot resist calling attention to a blood loss of 2.69 cc. daily. Not an ear is cocked when someone says, "I think she has a so and so, or my diagnosis is this and that." But ears prick up and eyes are turned and hushed silence follows the solemn pronouncement, "The plasma iron binding capacity has fallen 2 per cent in 3 weeks." In laboratory medicine numbers are not only comfortable, they are factual. One can count on them. Figures don't lie. For example, we ask for a consultation and our referee calls for the chart. To what page does he turn first and last? The pink lab sheet, of course. Wherein he finds such reassuring data as an LAP-612, AG ratio 3/2, cholesterol esters 90 per cent and more recently, with the wave length set at 526 the transmission is 0.962. "Aha!" says the consultant without further ado, "Now we're getting somewhere."

I submit we're getting nowhere. Rapidly and by the numbers. Until the average medico (whoever he might be) can digest these masses of digits, the disease will remain undiagnosed and his patient will remain untreated and finally die of old age. The science of ballistics and rocketry and killing demands close tolerances and six decimal places and log 10.18. The science of curing does not. The "objectivity" of laboratory data must be equated with the "subjectivity" of our personal observation. A patient feebly muttering "I thirst" may give more information than red cell volume 1,200 cc. (calculated)—1,500 cc. (ideal).

Measurements of ourselves are inevitably more difficult and less exact than measurements of things. This is mostly true because there is only one of us. Each is unique. We are cast from different molds. The patient in bed 4, ward 12 cannot be "scientifically" compared with the patient in bed 3, ward 12. If I am 6′ 6″ and you are 5′ 2″, are you too short or I too tall? If my cholesterol level is 350 and yours 250, is this good or bad—for you or for me? Or what? There are many slips between cup and lip. Even if no one ever made a mistake in the lab, if all machines were perfect, if all pipetting were done accurately, if all standards were uniform, tests of the hu-

man machine are not the tests of the Atlas booster, because the differences between numerical recordings of physiological data cannot be accepted in the same way that the sentence "I'm three" from the lips of our first-born is received.

Figures can lie, tell the truth, or do both. We have to be able to tell the difference, or at least try. The twentieth century scientist is offering us much. His methods, his creativity are based on the best which is in all of us. His language, however, is one of numbers, formulas and averages. We perforce must study his language or fail our sums, and it is getting mighty late for most of us to flunk out. It's a 100-1 chance we will do more for our patients by studying them than by playing their numbers.

Courtlandt D. Berry, M.D.
Orlando

Complete Heart Block Treated Surgically

"The Surgical Management of Complete Heart Block" is presented with a background of clinical experience elsewhere in this issue of The Journal by Drs. Spear, Daughtry, Chesney, and Gentsch of Miami. This is a new concept, of course, in that the first such reports were published only five years ago. Everyone interested in heart disease will enjoy reading this enlightening paper.

The Morgagni-Adams-Stokes syndrome, characterized by attacks of syncope due to asystole, is an entity which has long been recognized. Convulsive seizures may or may not be present, but the patient loses consciousness after a period of pallor. Cyanosis may replace the pallor, and the breathing becomes deep with possible Cheyne-Stokes quality. Asystole lasting longer than 60 seconds most frequently results in fatality. The attacks are usually a result of ventricular asystole during the course of complete heart block when the idioventricular rhythm fails to establish itself, and may also occur during episodes of ventricular tachycardia or fibrillation. The intensity of the first heart sound may vary. Occasionally interventricular septal calcification can be seen on x-ray. Atrial "A" waves may be seen in the jugular veins.

Congenital heart block, frequently associated with intracardiac anomalies, has been reported in less than 100 cases. Hypertensive heart disease accounts for a large number of patients with acquired heart block, as does ischemic heart disease, the latter being much more common. Heart block that occurs with rheumatic fever may persist in unusual circumstances. Digitalis intoxication causes a reversible type of complete heart block. Glenn collected data on 167 cases of postoperative heart block from eight American surgical clinics in 1958 and 1959. In this series, 80 per cent of the patients experienced heart block while in the operating room, 11 per cent within the first 24 hours postoperatively, and the remaining 9 per cent in the late postoperative period. Complete block occurred in 5 to 10 per cent of the cases of correction of ventricular defects including tetralogy of Fallot, and was more common in the presence of severe pulmonary hypertension and in cases in which cardiac arrest was employed.

Treatment of complete heart block includes removal of etiologic factors such as excess digitalis, quinidine, or opiates. Acute Adams-Stokes seizures sometimes may be treated effectively with epinephrine hydrochloride. If the heart block is due to vagal factors, atropine sulfate may be used. For chronic or frequent attacks, ephedrine, Paredrine or homatropine may be used. Paradoxically, digitalis is occasionally efficacious. Thyroid extract has been recommended.

Allen and Lillehei, in 1957, were the first to report the use of direct myocardial stimulation in patients with operatively induced heart block, although Zoll used external electrical stimulation in 1952 to revive patients with cardiac asystole complicating complete heart block. Starzl and Gaertner had set the stage for Lillehei's clinical work by producing chronic heart block in dogs in 1955.

Since 1957, several methods have been described for effectively treating patients with complete heart block utilizing an artificial pacemaker. The possibilities are as follows: The electrodes may be inserted into the ventricle percutaneously, intravenously, or by suturing an electrode to the ventricle by the transthoracic route. Zoll's technique of utilizing external (chest wall) stimulation or the transjugular endocardial electrode may be used as a temporary measure. If long term

direct stimulation is to be utilized, one electrode may be attached to the ventricle and one elsewhere in the body, or both electrodes may be attached to the ventricle. The power source may be attached directly to the electrodes and buried subcutaneously as recommended by Chardack in 1960; it may be attached to the electrodes which previously have been brought out through a skin incision as recommended by Lillehei and others, or the electrodes may be left subcutaneously and the power source can be external, with radiofrequency transmission as recommended by Glenn in 1960. Each of the three methods of stimulation has at least one inherent major disadvantage. When the power source is used subcutaneously, it may eventually need changes in the battery (in three to five years). Moreover, the stimulus and rate are fixed and cannot be changed. When the myocardial or transjugular endocardial electrode is brought out through the skin, infection is a danger, as experienced by Spear and his associates. When the radiofrequency transmission is used, the threshold to stimulation may continue to rise for indefinite periods, making stimulation sometimes impossible without widespread muscular contraction. There are other dangers common to all three methods: the wire electrode, being in constant motion, is prone to break in two, or the electrodes implanted in the myocardium may become detached, or they may erode a coronary vessel; and all of the methods are fraught with the danger that ventricular fibrillation may be produced by faulty technical aspects of the power source, although this is unusual when the transistorized unit is employed.

The widest experience has been that of Chardack and his associates in Buffalo, who have utilized a subcutaneously implanted pacemaker in 42 patients for the correction of complete heart block. Thirty-four patients survived surgery and their intrinsic myocardial disease for a follow-up varying from one to 25 months. Four of the deaths occurred within 20 days of the operation, and of the last four deaths, one was presumably related to the intermittency of pacemaker function, while three were due to myocardial disease.

All of these methods are new, and the long term results cannot be fully evaluated as yet. The reports in the literature are all based on successes in periods of months, rather than years, but in certain selected cases where all else has failed, the use of an artificial pacemaker may be a boon to the patient with complete heart block.

George H. Welch Jr., M.D.
St. Petersburg

Annual Meeting Scientific Program Is Announced by Committee

During the past few years, interest among the members of the Florida Medical Association attending the scientific programs presented at the Annual Meeting has been increasing. This response has taken place because of the quality of the presentations and their careful selection and arrangement in the various Scientific Assemblies. The trend toward increasing interest is encouraging; however, there has been a disappointing lack of increase in attendance.

In an effort to maintain the interest and attendance from past years and also to stimulate greater interest and increased attendance, the program for the meeting in May has been arranged about those particular sections attracting the most physicians last year. Other sections have been added which should attract those physicians who attended the previous Annual Meeting but neglected the scientific program.

On Thursday afternoon, the first day of the meeting, a problem case on the management of acute trauma will be presented as a panel discussion. Principal participants will be a general surgeon, a radiologist, an internist and an orthopedic surgeon. The protocol of the case is being prepared for publication in the April issue of The Journal, and copies will be available at the meeting for those who wish to study the case prior to the presentation.

Immediately following the panel, there will be five individual presentations by Florida physicians. One discussant has been selected for each paper. The speakers have been limited to 10 minutes each and the scheduled discussant to one minute.

On Friday morning, scientific films will be shown beginning at 9:00. Florida physicians having films have been requested to forward them to the Committee for review, and when approved, the author will be present at the showing to answer questions from the audience or to elaborate upon his subject when necessary.

Friday afternoon, the Florida Obstetric and Gynecologic Society has arranged a symposium on the topic, "Treatment of Endometriosis." Two members of the society will discuss the medical aspects of the subjects and two will discuss the surgical aspects. Each speaker has been allotted five minutes, thus allowing for open discussion at the end of the presentation.

Following the symposium, the guest speakers shared with the various special interest groups will be presented. They are Dr. James D. Hardy of Jackson, Miss., Professor and Chairman of the Department of Surgery, Director of Surgical Research, and Surgeon-in-Chief to the University Hospital at the University of Mississippi Medical Center, guest of the Florida Chapter of the American College of Surgeons and the Florida Association of General Surgeons; Dr. J. Frederick Eagle of New York City, Associate Clinical Professor of Pediatrics at Columbia University College of Physicians and Surgeons, guest of the Florida Pediatric Society; and Dr. Herschel Estep of Richmond, Va., Associate Professor of Medicine at the Medical College of Virginia, guest of the Florida Academy of General Practice.

Following their individual presentations, Drs. Hardy, Eagle and Estep will form a panel for the discussion of the topic, "Postoperative Metabolic Problems." Dr. John J. Farrell of Miami will serve as moderator.

This is briefly the program as arranged for the Association's Eighty-Ninth Annual Meeting on May 16-19 at Hollywood-by-the-Sea. It represents the thinking, planning and work of Drs. Richard C. Dever of Miami, Charles K. Donegan of St. Petersburg, Oscar W. Freeman of Orlando, and Thad Moseley of Jacksonville, who serve with me as members of the Committee on Scientific Work. We hope that those members of the Association who regularly attend the Annual Meeting will also attend the Scientific Assemblies for it is our belief that the program offers something of lasting value to each physician.

Charles H. Lasley, M.D., Chairman
Committee on Scientific Work
Clearwater

Association News

Summary of Board of Governors Meeting Held January 12, 1963

FMA Budget 1963.—Approved the financial statement for 1962 and adopted the budget for the Association for 1963 of $275,627, including $12,500 for reserve and $10,000 towards the cost of the building addition, based upon an anticipated income of $275,000. In 1962 the Association's income was $249,155, expenses $224,883 for a gross gain of $24,272. Total assets of the Association as of December 31, 1962 were $372,156.

Assistant Executive Directors.—Approved the appointment of Messrs. Alvin D. James and Eugene L. Nixon as Assistant Executive Directors of the Association.

Medical Examiners' Actions.—Directed the FMA Executive Office to notify the appropriate county medical society on being informed of disciplinary action by the State Board of Medical Examiners.

Key Physicians.—Appointed the Key Contact Physicians for 1963, who are responsible for liaison between the Association and Florida's Congressional delegation.

Council and Committee Reports.—Requested the annual Council and Committee reports be submitted to the Association's Executive Office no later than March 25, 1963.

TB Campaign.— Endorsed the campaign of the National Tuberculosis Association on symptoms of chronic cough and shortness of breath.

Reference Committees.—Adopted a resolution for presentation to the House of Delegates regarding reference committee meetings being limited to members of the Association and special guests.

Association's Policy.—Reminded the Council and Committee chairmen that everything must be cleared through the Council and in turn through the Board of Governors before being transmitted to outside agencies or organizations or individuals.

Report of Fraternal Delegate to Med. Assn. Puerto Rico.—Commended Courtlandt D. Berry, M.D., for the excellent report rendered the Board following his serving as fraternal delegate to the Medical Association of Puerto Rico and thanked him for serving in this capacity.

Emotionally Disturbed Children.—Commended the physicians of the state who, as private citizens, have taken the initiative in attempting to get a better program for the care and management of the emotionally disturbed children of the state.

Reviewed Various Council and Committee Reports, among them being:

Legislation.—Approved with commendation the recommendations of the Council on Legislation and Public Agencies for further implementation of Kerr-Mills legislation in Florida for presentation to the 1963 session of the Florida Legislature.

Physical Medicine and Rehabilitation.—Approved the recommendation of the Council on Specialty Medicine that the Florida Society of Physical Medicine and Rehabilitation be granted official recognition as a specialty group and granted representation on the Subcommittee on Specialty Medicine.

Commercial Health Insurance.—Endorsed the action of the Committee on Commercial Health Insurance and approved the Committee's plans to prepare a handbook to assist insurance review committees of component county medical societies.

Postgraduate Education.—Approved the recommendation of the Committee on Postgraduate Education that Dean Harrell be supported in his prerogative of projecting his ideas in the field of postgraduate medical education at the University of Florida College of Medicine and in his autonomous control of seminars and courses pertaining to postgraduate medical education at the college.

The Journal.—Received a report from the Editor of The Journal and expressed appreciation for the fine work in the improved financial and scientific aspects of The Journal.

Scientific Work Committee.—Reviewed the report of the Committee on Scientific Work, outlining the scientific program for the Annual Meeting, May 16-19, 1963, at the Diplomat Hotel, Hollywood.

Committee on Fee Schedules.—Reviewed material which will be presented to the Florida Industrial Commission, Workmen's Compensation Division, after final clearance has been obtained from each member of the Committee.

Resolutions.—Referred resolutions referred from county medical societies to the appropriate councils and committees of the Association.

Next Board Meeting.—Set the date for the next meeting of the Board of Governors for April 7, 1963.

Fifth Annual Conference Of County Medical Society Presidents and Secretaries

For the fifth consecutive year the incoming presidents and secretaries of the component county medical societies gathered in Jacksonville for the conference sponsored annually by the Florida Medical Association to promote closer liaison between the Association and the societies. The conference theme was "Florida Medicine in the Space Age: Are We Up-To-Date?" The two day meeting, held at the Hotel Robert Meyer on January 12 and 13, 1963, attracted a record attendance of 127. Forty-five officers and executive secretaries from 28 societies represented 96 per cent of the total membership of the county societies. In addition, 54 other physicians attended.

President Robert E. Zellner of Orlando presided over the session on Saturday afternoon. After extending a cordial welcome to the county society officers from all sections of the state, he introduced Dr. F. J. L. Blasingame of Chicago, Executive Vice President of the American Medical Association, whose address was entitled "How We Doing?" Everywhere confronted with this question as he travels throughout the country, Dr. Blasingame reported that American Medicine is "doing very well, but not as well as it could and not as well as it should." Medicine, he said, is now in the big league and must play that kind of game. In the role of international diplomat Medicine is likewise doing well, he reported, and he urged all physicians to keep informed, examine their convictions aggressively and maintain confidence in themselves as they offer leadership to the world. Dr. Blasingame pointed out the adaptability of the AMA system in contrast to a rigid system of government control in meeting the needs of the people, and urged physicians to stay close to the people. He reminded them that two million people a day see doctors in this country and that this vast audience offers a great opportunity to alert citizens to the many dangers inherent in current legislative proposals which would inhibit a climate of freedom in day to day patient contact and would regiment patients as well as doctors.

Dr. Samuel M. Day of Jacksonville, the Association's Secretary-Treasurer, gave a well illustrated comprehensive survey which covered the subject, "What We Have and What We Need: Florida's Indigent Care Programs and Further Kerr-Mills Implementation by the Legislature." Dr. Day stated that only 6 per cent of the 1961 dollar was expended for health and noted that medical care expense has increased only slightly in comparison with personal income. He reported tremendous growth in voluntary health insurance and gratifying growth in new hospital construction. After reviewing the health care of the needy in Florida, he explained the progress and present status of legislation to meet the needs.

The next speaker was Dr. Courtlandt D. Berry of Orlando, fraternal delegate to the Medical Association of Puerto Rico. He reported on the socialistic aspects of the private practice of medicine in Puerto Rico, already 80 per cent socialized, advised the profession to face up to the realities of socialization and urged that something be done about the many unlicensed physicians practicing in Florida.

Dr. Henry J. Babers Jr. of Gainesville, chairman of the Association's Committee on Fee Schedules, then discussed "The FMA Relative Value Studies and the Workmen's Compensation Fee Schedule," relating what has been done and the present status. He found that problems had become much clearer and that a new spirit of unity in approaching them was promoting much better understanding.

Dr. Floyd K. Hurt of Jacksonville, chairman of the Association's Committee on Members Insurance, spoke on "Benefits of FMA Membership Programs." He explained the advantages of the Association's programs and sought wider participation by the doctors. "Who's Chasing the Blues? Where Blue Shield Has Been and Where It's Going" was the subject discussed by Dr. John D. Milton of Coral Gables, chairman of the Professional Relations Committee, Blue Shield of Florida. He compared the results of a physicians survey and a subscribers survey in Florida and reviewed the nationwide progress of Blue Shield. He reminded the doctors that what lies between them and government control is a satisfied customer.

A stimulating panel discussion on "Medicine Down on the Farm; What We Have in Common with Our Friends in Agriculture" was the concluding feature of the Saturday afternoon session. Dr. J. Basil Hall of Tavares, chairman of the Association's Committee on Rural Health, served as moderator, and the panelists were T. K. McClane Jr., Executive Vice President, Florida Farm Bureau Federation, Dr. George W. Karelas of Newberry, a member of the Association's Committee on Rural Health, and Dr. Francis T. Holland of Tallahassee, a member of the AMA Council on Rural Health. Dr. Holland reviewed the 18 year history of the AMA Council and stressed urban-rural interdependence. He urged the county society officers to contact leaders of farm organizations and offer aid in promoting mutual objectives. Mr. McClane explained the nature and aims of the Farm Bureau with its 64 county societies similar to the county medical societies, deplored the present day socialistic trends and sought greater cooperation on the county level to promote mutual aims. Dr. Karelas described his personal experience in a rural area and declared he would not trade his practice for any city practice.

Dr. Warren W. Quillian of Coral Gables, President-Elect of the Association, presided over the Sunday morning session. Harry T. Gray Esq. of Jacksonville, the Association's legal counsel, opened the program with a discussion of "What's Legal and Illegal: Some Points Your Society Should Watch." He stressed in particular the importance of incorporation and stated that the county society with proper by-laws duly abided by is legally safe. He urged checking of charters (they are not constitutions) and by-laws to be sure they are adequate for today.

A panel discussion followed with Dr. Leo M. Wachtel of Jacksonville, the Association's public relations officer, serving as moderator. Six panelists reported on "Operation Success: What Some County Societies Are Doing." Dr. William A. Shaver of Miami, chairman of the Committee on Public Relations of the Dade County Medical Association, spoke on "DCMA Seat Belt Campaign" and described the success of this project undertaken by his county society. He urged all doctors to set the example by using seat belts and advising others to use them as a valuable means of preventing injury in automobile accidents. "Escambia Future Doctors Clubs" was the subject

discussed by Dr. Alpheus T. Kennedy of Pensacola, former chairman of the Public Relations Committee of the Escambia County Medical Society. Dr. Kennedy said his county society was the second one in the nation to have a Future Doctors Club. He gave details of this activity, emphasized its importance in view of the strong competition from the various science fields, and urged his colleagues to seek future doctors in their communities.

In his discussion of "Tampa Bay Area Cooperative Public Information Program," Dr. Edward L. Cole Jr. of St. Petersburg, immediate past president of the Pinellas County Medical Society, described such features as setting up a committee to combat adverse television, radio and newspaper coverage, bringing in distinguished speakers, cementing the relationship with other groups and maintaining a speakers bureau. Dr. Rothwell C. Polk of Jacksonville, chairman of the Committee on Public Relations of the Duval County Medical Society, spoke on "Phone-In Medical Radio Shows." Declaring communications the basic key to a good public relations program, Dr. Polk reminded the physicians that each doctor is his own best public relations officer. He then described the successful weekly medical radio show his county medical society conducts.

Dr. David J. Lehman Jr. of Fort Lauderdale, chairman of the Voluntary Health Insurance Review Committee of the Broward County Medical Association, discussed "Broward Legislative and Prepayment Review Programs." He emphasized the value of an educational program to clear misunderstanding and promote progress. The final panelist was Dr. Donald M. Mosher of Eau Gallie, Assistant Medical Director, Guided Missile Range, Pan American World Airways, substituting for Dr. Laurent P. LaRoche of Cocoa Beach, chairman of the Public Relations Committee of the Brevard County Medical Society. His subject was "Cooperative Program of Physicians in Private Practice, Industry and the Military." Dr. Mosher described the problems posed in a community like the Cape Canaveral area by the rapid population growth and slower development of hospital facilities and he outlined the cooperative program under way in Brevard County between physicians in private practice, in industry and in military service.

At both sessions a question and answer period followed the presentation by each speaker. Concluding the meeting, an open discussion of county and state programs and problems covered a wide range of subjects.

News

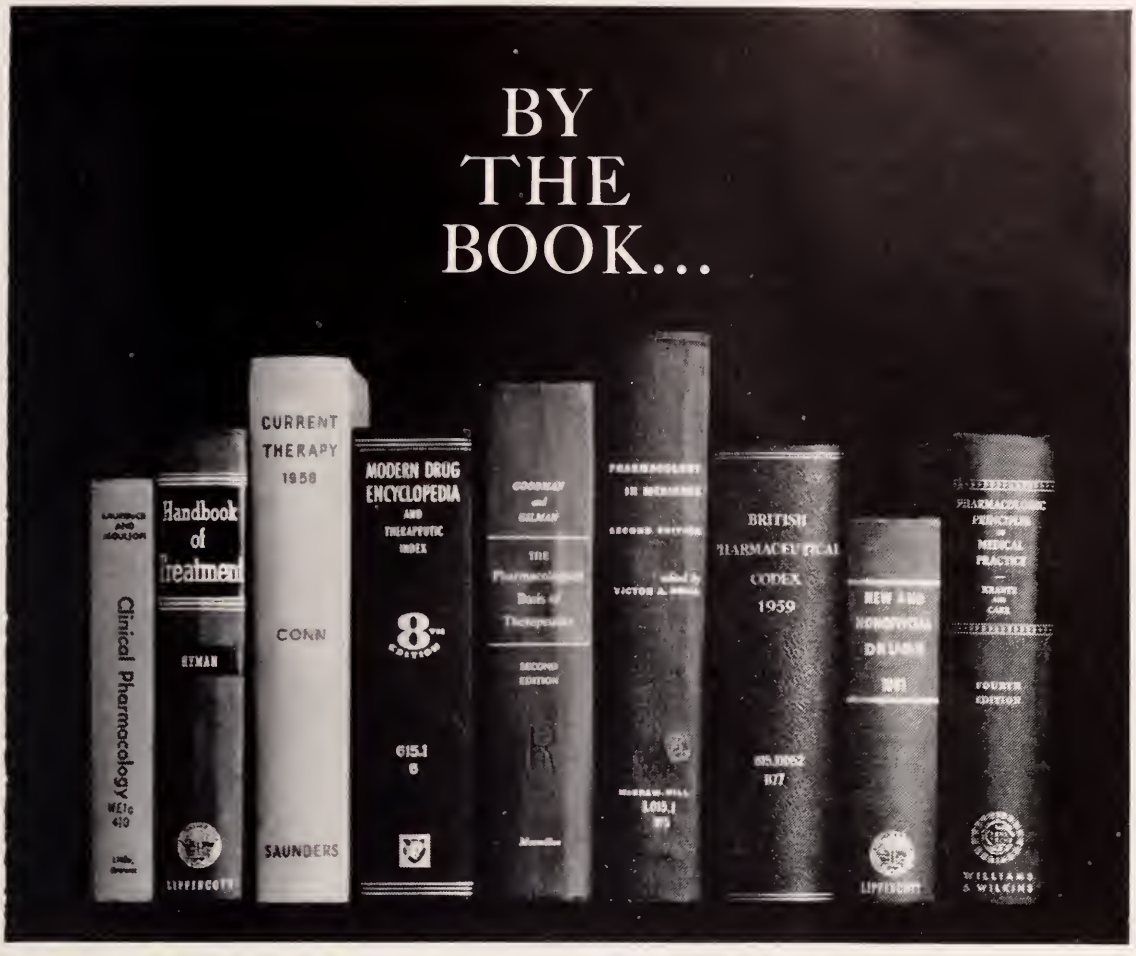
The medicolegal problems of hypnosis and the legal aspects of the use of investigational drugs will be among the topics discussed at the American Medical Association's National Medicolegal Symposium which begins March 8 at Miami Beach. Sponsored by the Legal and Socio-Economic Division, the two day meeting in the Americana Hotel will feature trial demonstrations in which outstanding medical experts, attorneys and jurists will participate. The address at the luncheon on March 8 will be presented by Dr. Edward R. Annis of Miami, President-Elect of the American Medical Association.

A series of articles which originated within meetings of the Voluntary Health Insurance Review Committee of the Broward County Medical Association and were published in early December issues of the Miami Herald have been reprinted in an attractive booklet. It carries the message that "this information is published by the Broward County Medical Association to assist the Voluntary Health Insurance Review Committees of County Medical Societies in Florida in this important new endeavour." Dr. David J. Lehman Jr. of Hollywood is chairman of the Association's Committee.

The 31st Annual Assembly of the Southeastern Surgical Congress will convene March 18-21 in the Americana Hotel at Miami Beach. The program was published in the February issue of The Journal, pages 676-677.

The mural presented by the Florida Society of Ophthalmology and Otolaryngology to the Bascom Palmer Eye Institute of the University of Miami School of Medicine was dedicated February 3. Funds for the project were appropriated two years ago by the Society.

The quality control program of the American Society of Clinical Pathologists, utilized for the past four years in the nation's pathology laboratories, has been made available to medical laboratories in hospitals. The program was restricted to ASCP members who studied its application in more than 400 workshops and seminars. The manual now being offered with a kit containing all the forms necessary to institute the program in hospital laboratories was prepared for the workshops. Drs. John B. Miale and James J. Griffitts of Miami and Dr. Alvan G. Foraker of Jacksonville are members of various Councils constituting the Commission on Continuing Education of the Society which announced the availability of the quality control program.



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Deaths

Bevis, Henry Powell, Arcadia; born in Bascom on Sept. 14, 1885; University of Nashville Medical Department, 1910; engaged in the general practice of medicine in Arcadia for more than 50 years; during World War I, served from 1917 to 1919 in the United States Army with the rank of captain; was three times president of his county medical society; held membership in the American Medical Association, American Academy of General Practice and Seaboard Air Line Railroad Surgeons Association; died Aug. 18, 1962, aged 77.

Dodson, Mayhew W., Pensacola; born in Hermitage, Tenn., on Oct. 7, 1900; Vanderbilt University School of Medicine, 1926; served as a first lieutenant, United States Army Reserve, 1926; interned at Hillman Hospital, Birmingham, Ala.; was physician for Bagdad Land and Lumber Company, Santa Rosa County, from 1929 to 1939; after completing graduate work at New York polyclinic, entered the private practice of obstetrics and gynecology in Pensacola in 1939; served as Escambia County physician in 1914 and 1942; was a past president of the Escambia County Medical Society; held membership in the American Medical Association, Southern Medical Association, Gulf Coast Clinical Society and Florida Obstetric and Gynecologic Society; died Nov. 27, 1962, aged 62, of cardiac arrest following pneumonectomy.

Gilbert, Elsie Martinson, Tampa; born in Council Bluffs, Iowa, on Feb. 8, 1874; American Medical Missionary College, Battle Creek, Mich., and Chicago, 1900; served one year at Battle Creek Sanitarium and five years at Graysville Sanitarium, Graysville, Tenn.; was graduated from the College of Physicians and Surgeons, University of Illinois, Chicago, in 1908 and located in Tampa, where she engaged in the practice of medicine for 53 years, specializing in anesthesiology at first and later in general practice; was the first woman physician to be licensed to practice medicine in Florida; was a member of the American Medical Association and the Southern Medical Association; died July 9, 1962, aged 88.

Harrison, Paul Wilberforce, Penney Farms; born in Scribner, Neb., on Jan. 12, 1883; Johns Hopkins University School of Medicine, Baltimore, 1908; served an internship at Massachusetts General Hospital, Boston, from 1908 to 1910; spent three years as physician and surgeon at Berea College in Kentucky; known as the beloved "Desert Doctor," served over 40 years as a medical missionary in Arabia under the auspices of the Reformed Church of America, engaging in the practice of general surgery; since 1954 had been resident physician at Memorial Home Community, Penney Farms; was a member of the American Medical Association and a fellow of the American College of Surgeons, was the author of many articles on medicine and missions; died Nov. 30, 1962, aged 79.

McLane, Jesse Newman, Pensacola; born in Geneva, Ala., on March 8, 1899; University of Tennessee College of Medicine, Memphis, Tenn., 1925; served an internship at Baptist Memorial Hospital, Memphis, and a residency at Long Island College Hospital, Brooklyn, N. Y., and pursued further postgraduate study at Baltimore Eye, Ear and Throat Hospital, Baltimore; was a vet-



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eran of World War I; had engaged in the private practice of medicine in Pensacola since 1926, specializing in ophthalmology and otolaryngology; was a past president of the Escambia County Medical Society and for two years represented that society in the House of Delegates of the Florida Medical Association; held membership in the American Medical Association and the societies of his specialty; died Oct. 14, 1962, aged 63.

Seeds, John Berkley, Miami; born in Trenton, N. J., Sept. 5, 1873; University of Maryland School of Medicine, 1903; practiced 12 years in Trenton before locating in Miami in 1915; practiced there for 40 years as an eye, ear, nose and throat specialist, retiring in 1955; held membership in the American Medical Association; died January 1, aged 89.

Shepard, Vitol Samuel, West Palm Beach; born in Newark, N. J., in 1917; Hahnemann Medical College, Philadelphia, 1943; engaged in the general practice of medicine in West Palm Beach for a short period; after several years of special study in Philadelphia, resumed practice in West Palm Beach as a general surgeon; served as a lieutenant commander in the United States Navy during World War II; was a member of the American Medical Association, a director of the Palm Beach County Unit of the American Cancer Society and a member of the Florida Division of the American Cancer Society Service Committee; died Nov. 1, 1962, aged 46.

Walker, Richard Henry Jr., Orlando; born in Gulfport, Miss., on April 13, 1903; University of Virginia School of Medicine, Charlottesville, Va., 1927; served internships at New York Post Graduate Hospital in New York City and Kings County Hospital in Brooklyn, N. Y.; served with the Veterans Administration in Johnson City, Tenn.; received a fellowship at the Willis Campbell Orthopedic Clinic in Memphis, Tenn.; entered the practice of orthopedics in Orlando in 1938; was a member of the American Medical Association, Southern Medical Association, American College of Surgeons, Southeastern Surgical Congress, American Geriatric Association and the Florida Crippled Children's Commission; died December 1, 1962, aged 59.

Williams, William Lewis, Pensacola; born in Carbon Hill, Ala., in 1902; University of Virginia School of Medicine, Charlottesville, Va., 1929; engaged in postgraduate work at Vanderbilt University School of Medicine, Nashville, Tenn., and in Chicago; entered the private practice of medicine in Pensacola in 1939, specializing in obstetrics and gynecology; was a past president of the Pensacola Obstetrical and Gynecological Society; held membership in the American Medical Association and was a fellow of the American College of Surgeons; was a commander in the Navy Medical Corps in World War II; died Sept. 30, 1962, aged 60.

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(Continued on page 764)

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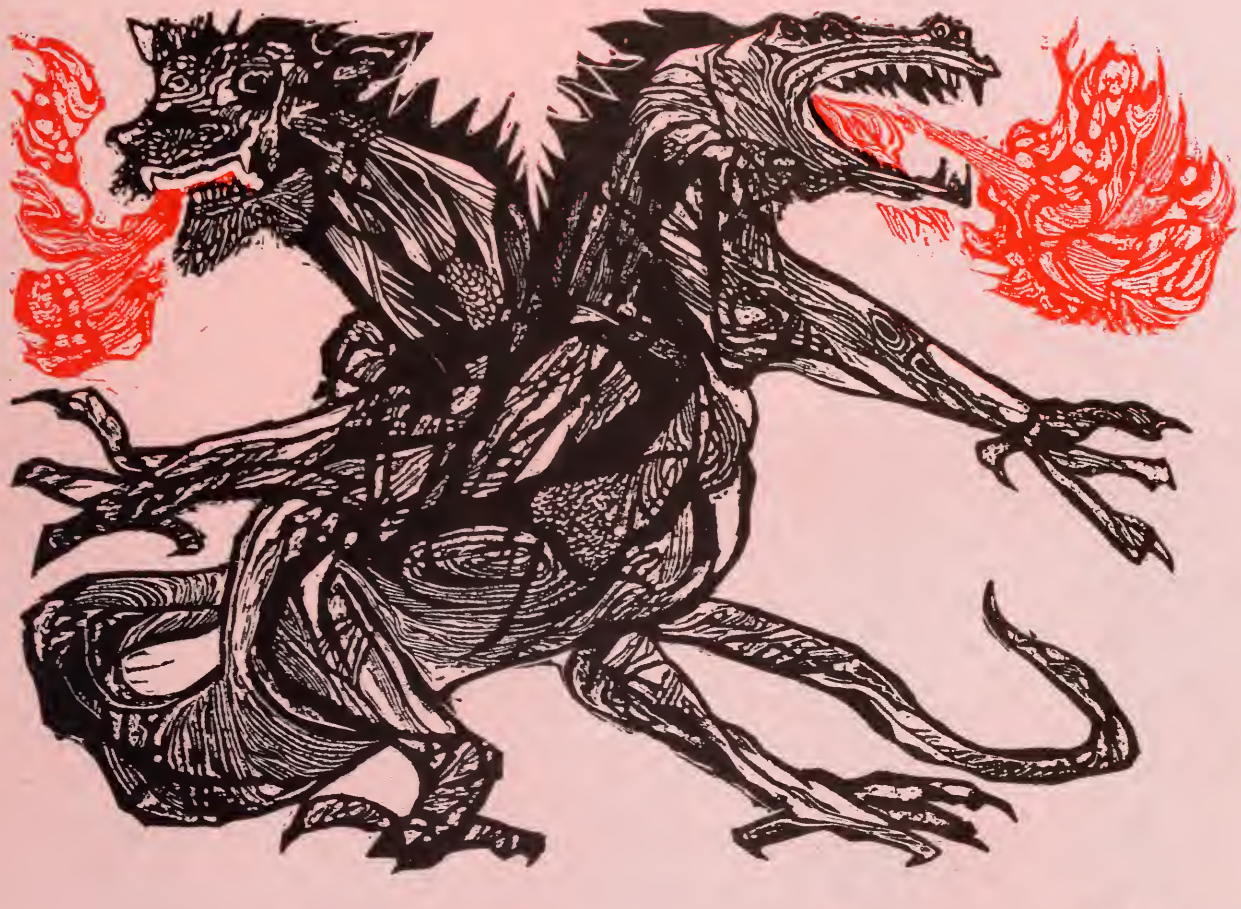
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Protected by U.S. Patent Numbers: 2,661,372 and 2,661,373.

1 "significant hearing improvement" occurred with Arlidin in 32 of 75 patients with recent onset hearing impairment due to labyrinthine artery ischemia.

Rubin, W. and Anderson, J. R.: Angiology 9:256, 1958.

3 Arlidin "appears to be one of the most satisfactory [vasodilators], having the advantages of minimal side effects, being well tolerated and possessing a sustained action" in improving circulation of the inner ear.

Seymour, J. C.: Laryngology & Otology 74:133, 1960.

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vascular insufficiency of the labyrinth is an important etiologic factor in sudden perceptive deafness . . . "vasodilators [Arlidin] are of considerable value."

Wilmot, T. J. and Seymour, J. C.: Lancet 1:098, 1960.

4

early cases of sudden perceptive deafness should be treated by immediate stellate block "supplemented by the most effective vasodilator drug [Arlidin] . . . energetic measures to retain blood supply to the inner ear are imperative."

Wilmot, T. J.: J. Laryngology & Otology 73:466, 1959.

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Clinical benefit in approximately 50% of cases of recent onset hearing loss treated with adequate vasodilator and other supportive therapy is also reported by Sheehy.

Sheehy, J. L.: Laryngoscope 70:885, 1960.

NOTE—before prescribing Arlidin the physician should be thoroughly familiar with general directions for its use, indications, dosage, possible side effects and contraindications, etc. Write for complete detailed literature.

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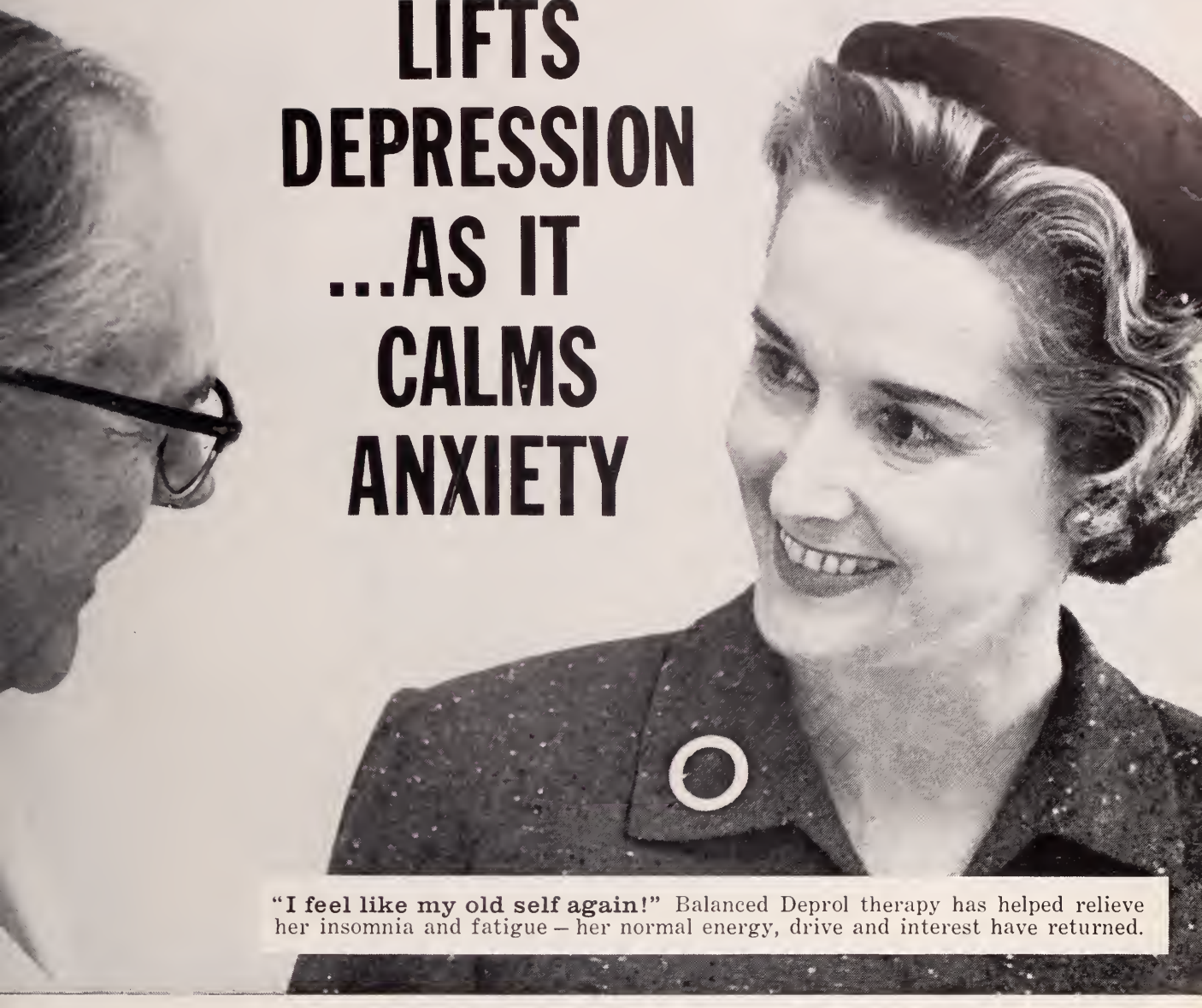
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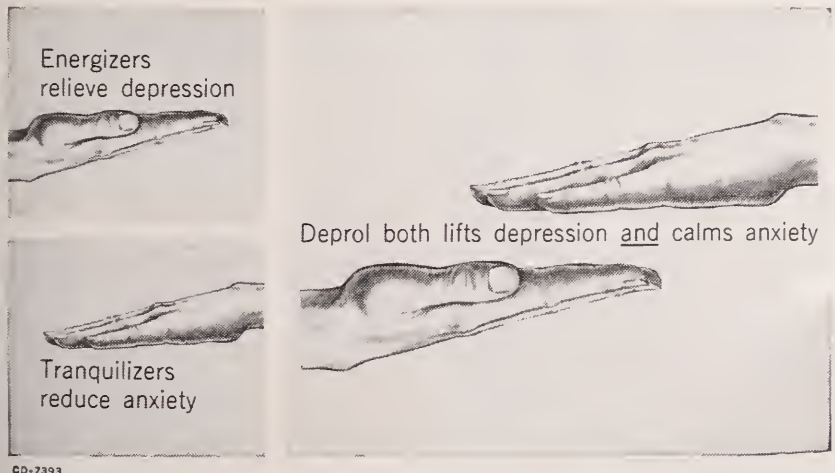
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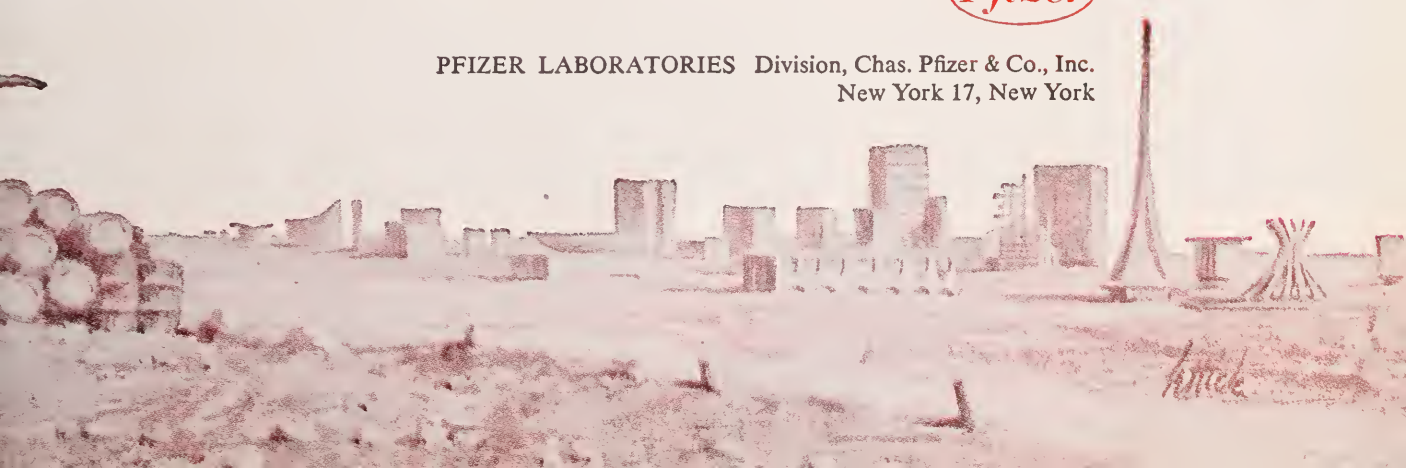


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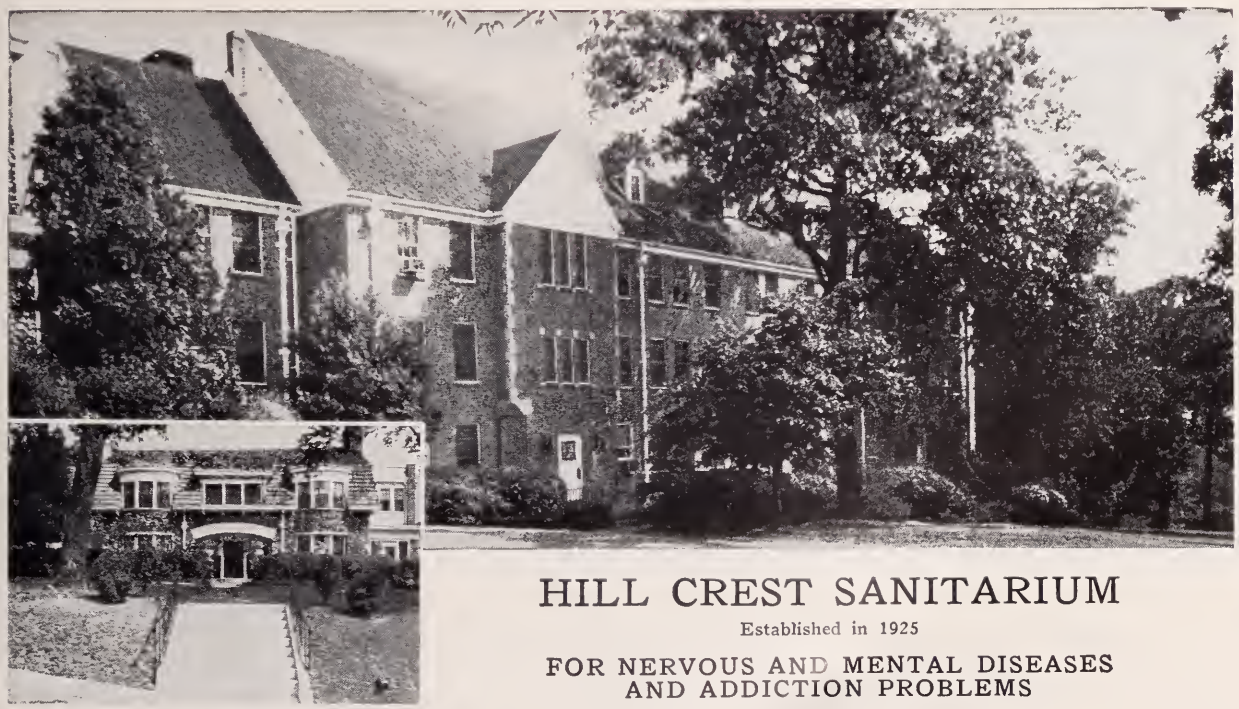
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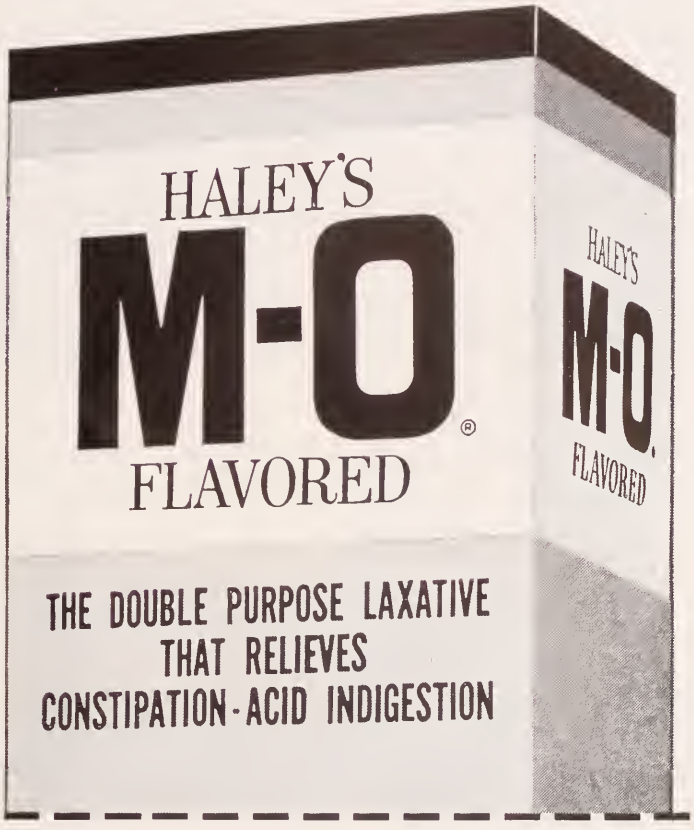
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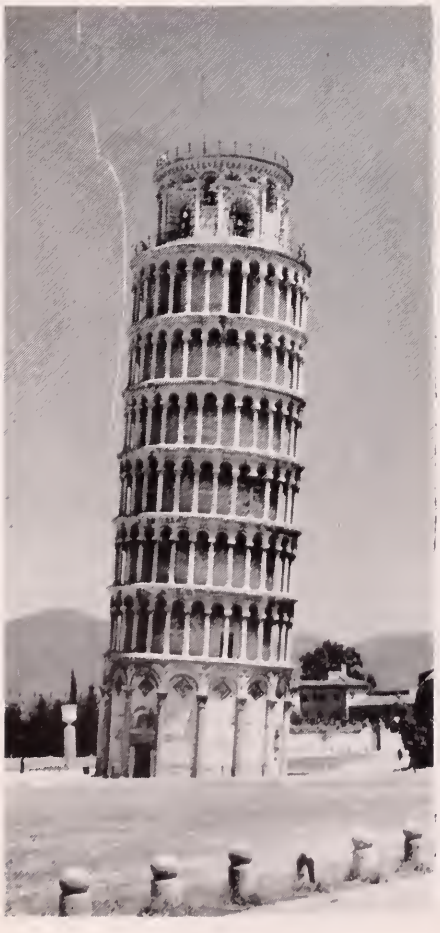
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1. *Methyltestosterone-Thyroid in Treating Impotence*, A. S. Titeff, *General Practice, Vol. 25, No. 2, February, 1962, pp. 6-8.*
2. *Thyroid-Androgen Relations*, L. Hellman, et al., *The Jrl. of Clin. Endocrinology and Metabolism, August 1959.*

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[1] Simon, F. & Bernstein A.: "The Treatment of Obesity in Patients with Cardiovascular Disease," Angiology, *12*:32-37, Jan. 1961.
[2] Plotz, M.: Modern Management of Obesity, J.A.M.A. *170*:1513-1515 (July 25) 1959.
[3] Bernstein, A. & Simon, F.: "Treatment of Obese Diabetics and Arteriosclerotics," Clin. Med. 907-920, May 1961.

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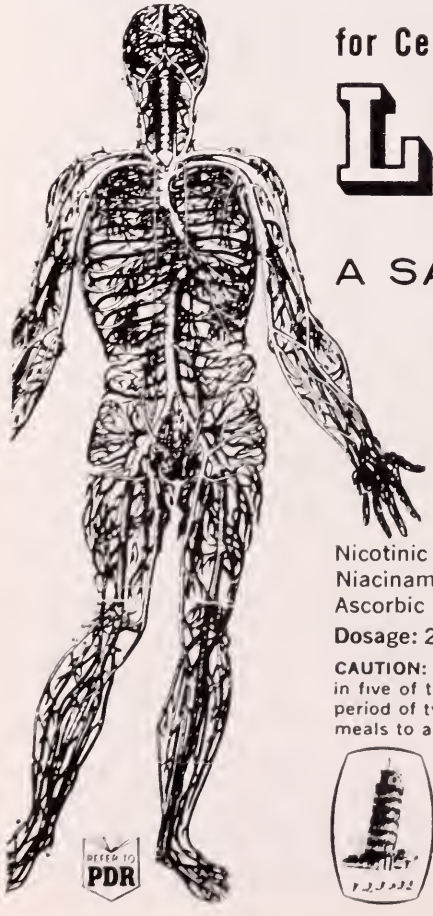
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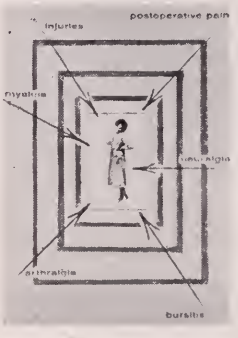
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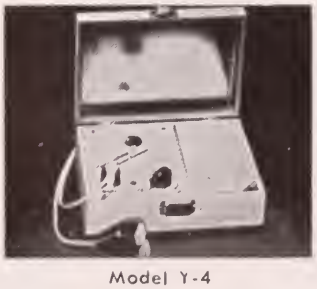
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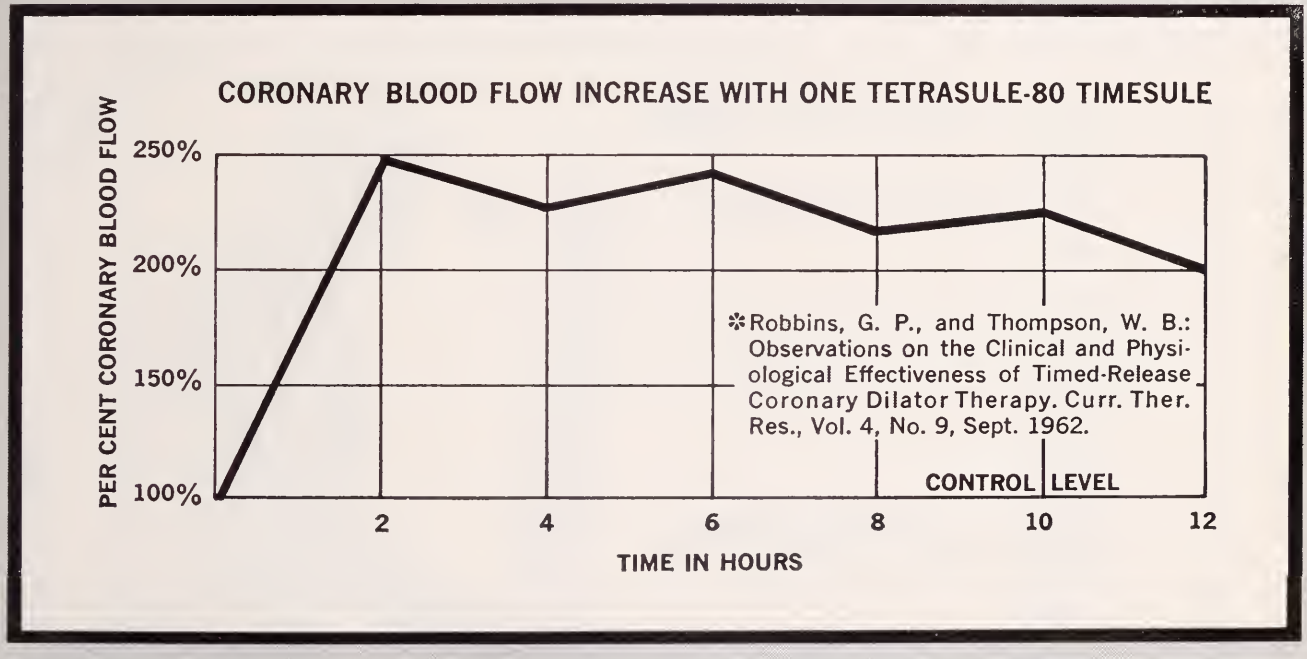
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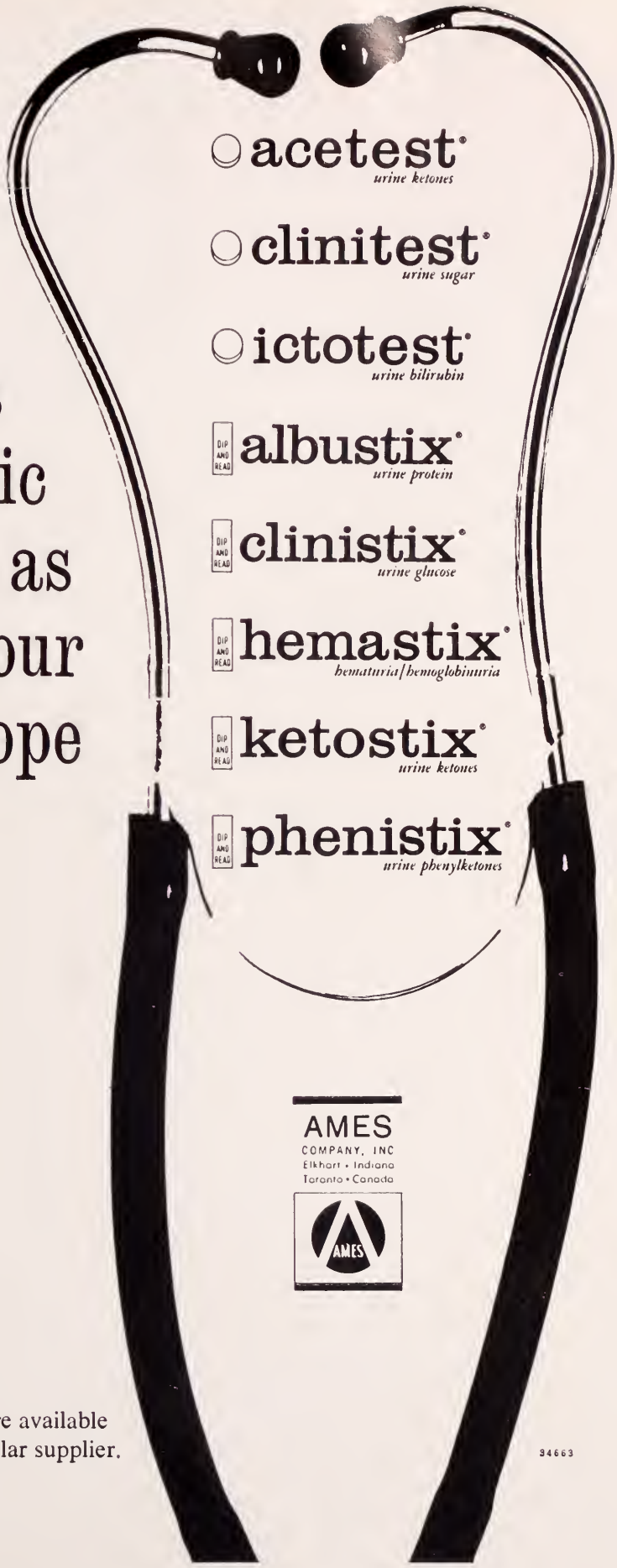
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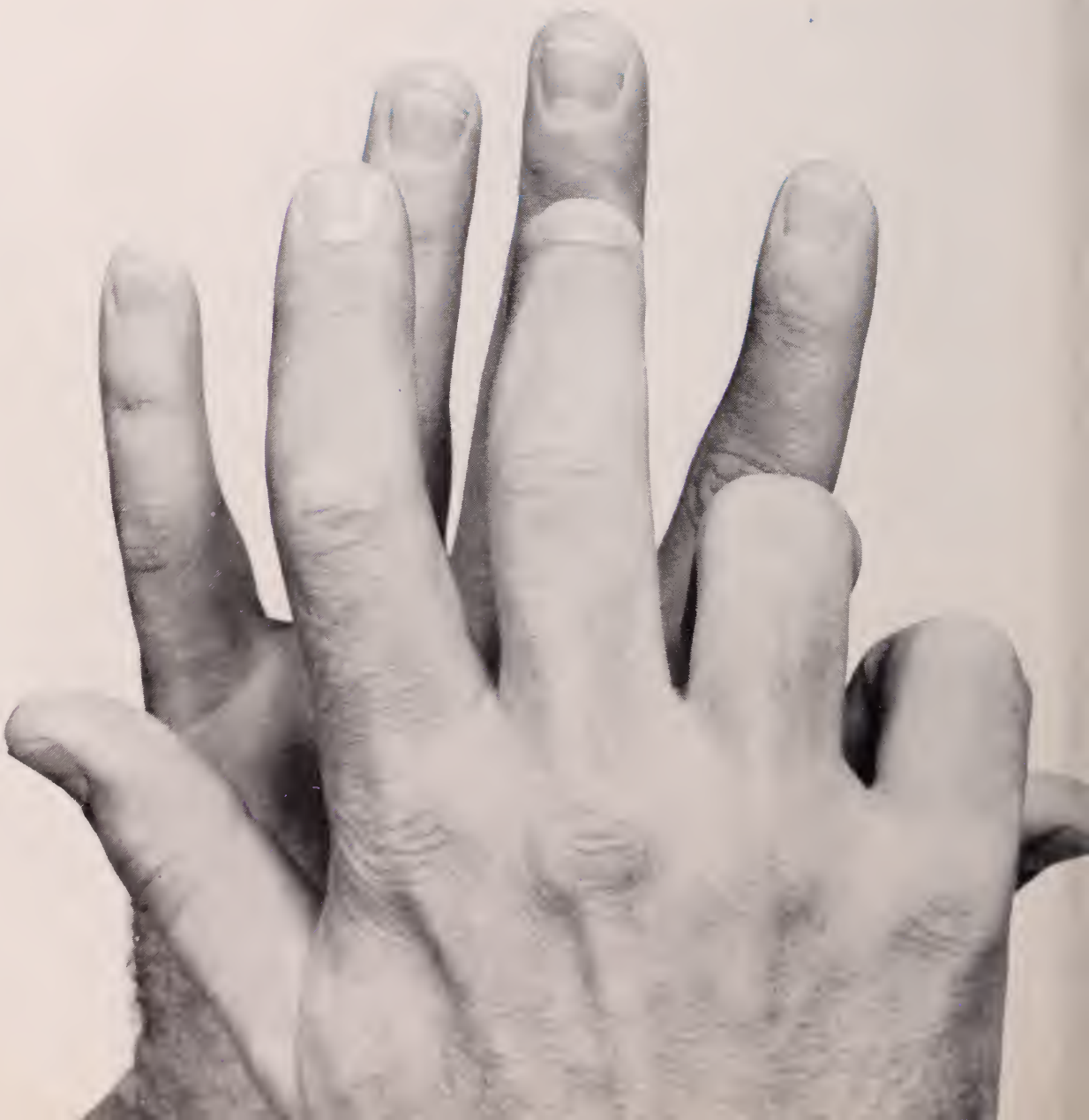
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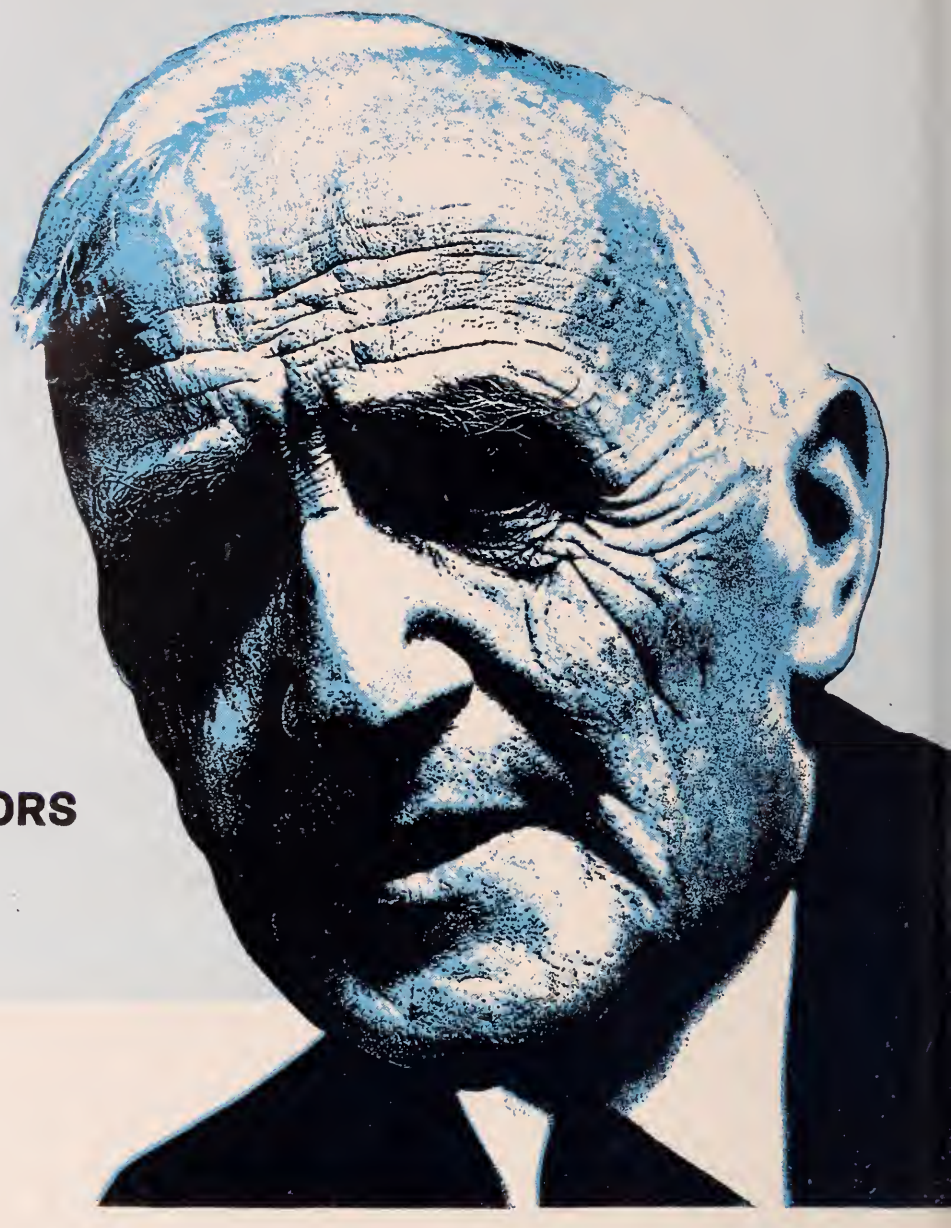
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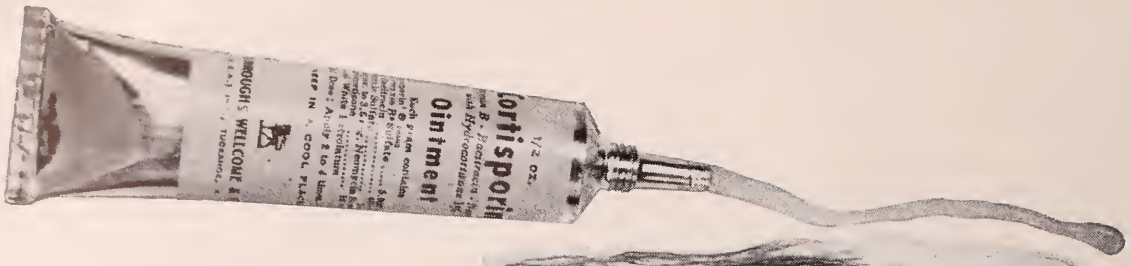
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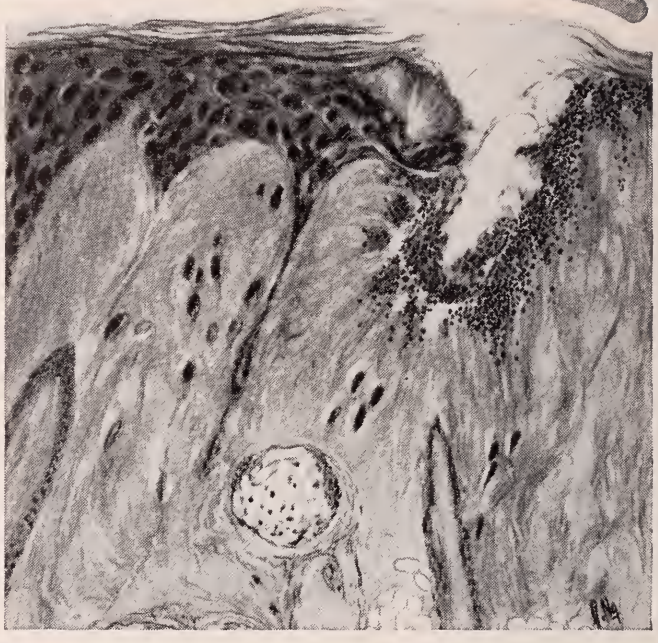
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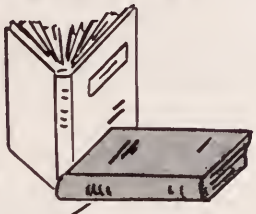
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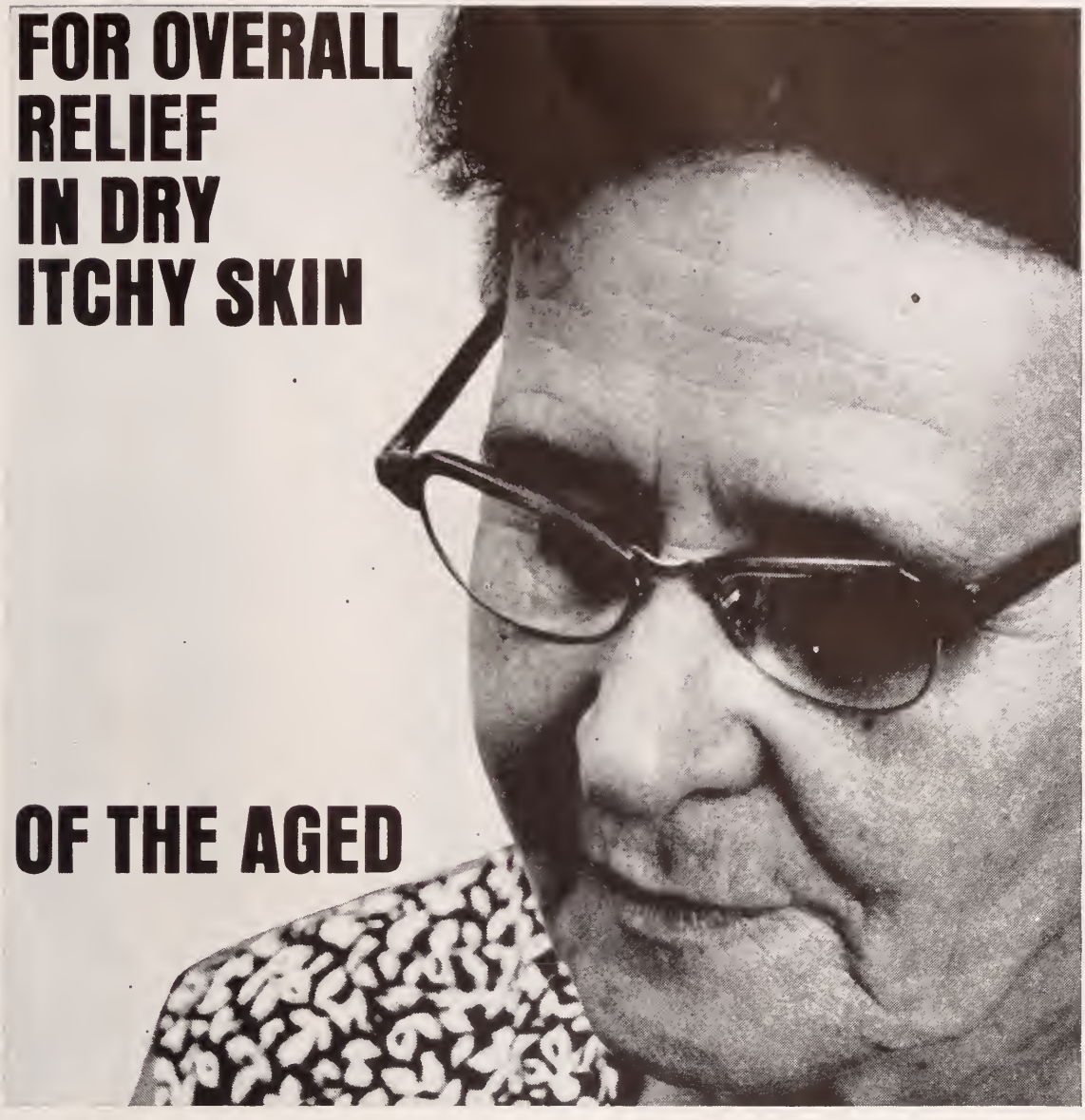
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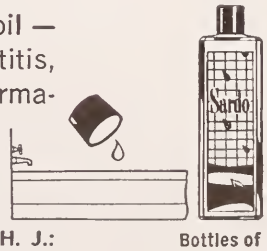
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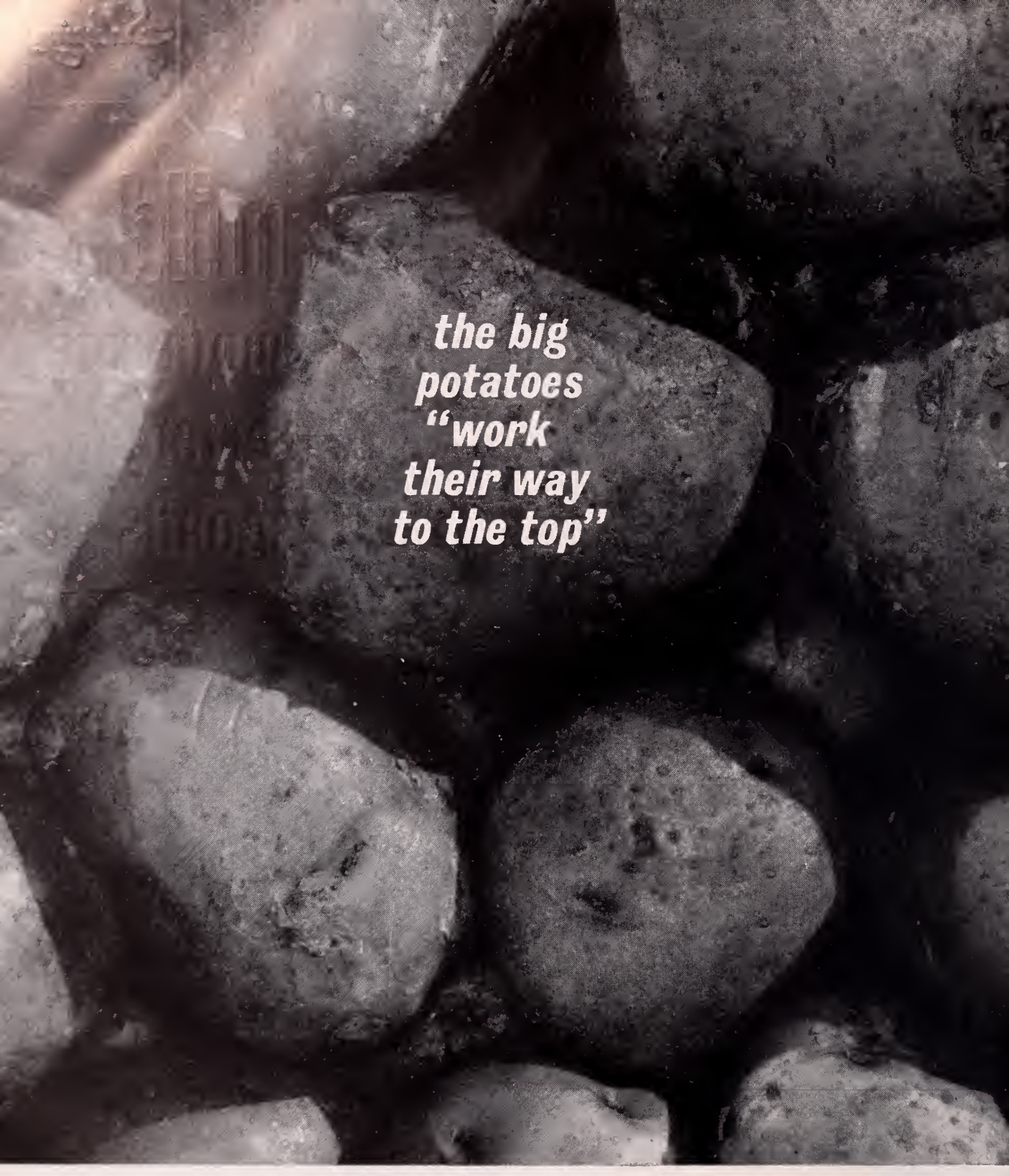
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The JOURNAL
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Paroxysmal Pseudoventricular Tachycardia in an Infant With the Wolff-Parkinson-White Syndrome

Gerold L. Schiebler, M.D.*
Roy S. Wood, M.D.*
GAINESVILLE
and William S. Johnson, M.D.
LAKELAND

The clinical features of paroxysmal tachycardia in infants and children are well documented.[1-3] Approximately 10 per cent of the patients having paroxysms of tachycardia exhibit the electrocardiographic features of the Wolff-Parkinson-White syndrome.[2,3] In this electrocardiographic entity, the P-R interval is short and the QRS duration prolonged because of the addition to the QRS complex of a slow initial force called a delta wave. Most persons with the Wolff-Parkinson-White pattern are thought to have normally functioning hearts, but to be prone to bouts of supraventricular tachycardia.[4]

Usually patients with the Wolff-Parkinson-White syndrome have QRS complexes during a supraventricular tachycardia that are indistinguishable from the QRS complexes found in other supraventricular tachycardias. The QRS complex is narrow because the rapid supraventricular impulse is thought to utilize the normal conduction pathway through the atrioventricular node.

On occasion, however, a wide QRS complex is seen in patients with a supraventricular tachycardia and the Wolff-Parkinson-White syndrome. In this situation, the rapid supraventricular impulse is believed to utilize the same abnormal conduction pathway involved in the production of the Wolff-Parkinson-White pattern. The impulse then bypasses the atrioventricular node and causes early excitation of a portion of the ventricular musculature. This early depolarization manifests itself as the delta wave of the QRS complex in the Wolff-Parkinson-White pattern and produces wide QRS complexes during a supraventricular tachycardia. These wide QRS complexes mimic a true ventricular tachycardia, and thus this electrocardiographic pattern has been labeled "pseudoventricular tachycardia."[5,6]

This pseudoventricular tachycardia occurs so rarely in infants and children[7] that it is often not recognized as a variety of supraventricular tachycardia.

Report of Case

A male infant was born after a normal pregnancy, labor and delivery, weighing 6 pounds 6 ounces. His development appeared normal, and he was in good health until the age of six months when he acquired a respiratory infection characterized by rhinorrhea and coughing. The next day the infant awoke with a scream and was found by his parents having an apparent convulsive seizure. Following this he transiently appeared normal, but soon lapsed into a three hour sleep. On awakening he appeared his usual self, but one hour later a similar episode occurred. The infant was immediately taken to his family physician in whose office he had three more seizures. Then the case was referred to one of us (W.S.J.).

On examination, the infant appeared in a terminal state, being extremely pale with respirations of 40 per minute and a temperature of 100.2 F. by rectum. The physical examination gave negative results except for signs of a mild respiratory infection and a tense anterior fontanel. Fluid obtained by spinal puncture contained no cells and had a normal protein content. The white blood cell count was 8,700 per cubic millimeter with a normal differential. The tentative diagnosis was encephalitis.

*Department of Pediatrics, University of Florida College of Medicine, Gainesville.
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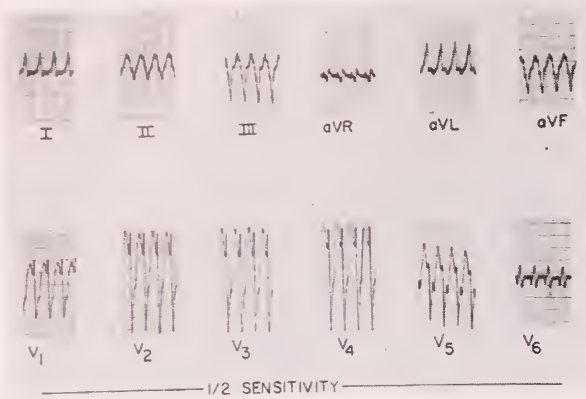


Fig. 1.—Electrocardiogram, taken Jan. 28, 1961, at 7 p.m., showing paroxysmal pseudoventricular tachycardia, rate 270 beats per minute. This rare form of supraventricular tachycardia with wide QRS complexes is seen in the Wolff-Parkinson-White syndrome. Some leads suggest that a P wave consistently occurs just prior to the QRS complex.

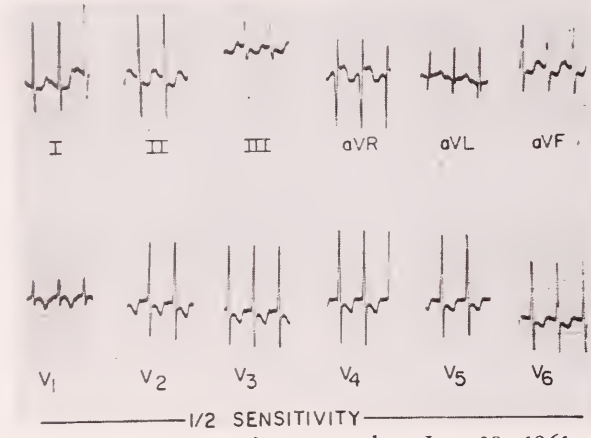


Fig. 2.—Electrocardiogram, taken Jan. 28, 1961, at 11 p.m., showing a sinus rhythm (PR 0.11, QRS 0.07). The diffuse ST-T segment changes are usually seen after a bout of tachycardia and digitalis administration.

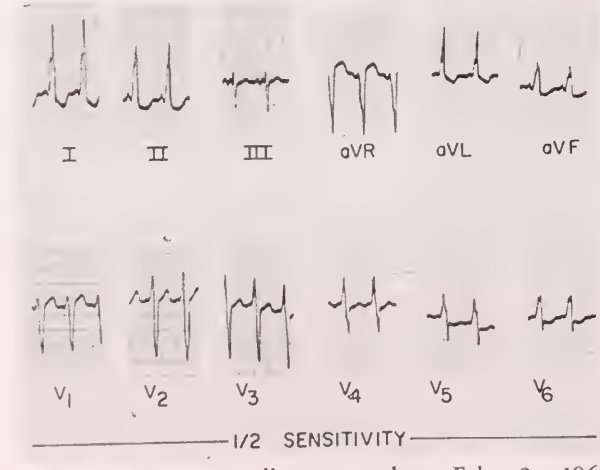


Fig. 3.—Electrocardiogram, taken Feb. 2, 1961, showing the classical Wolff-Parkinson-White electrocardiographic pattern, type B. In this type, the predominant QRS complexes in the right precordial leads are negative, and thus the pattern mimics left bundle branch block. The PR interval (0.07) is short, and the prolonged QRS (0.10) is initiated by a delta wave.

Two hours after admission to the Lakeland General Hospital, the infant was noted to be cyanotic, cold, and dyspneic with a respiratory rate of 100 per minute. An extreme tachycardia (fig. 1) and hepatomegaly were the salient physical findings. Oxygen and digitalis were administered, a total of 0.65 mg. of digoxin being given over a 24 hour period. The heart rate decreased, but fluctuated between 150 and 180 beats per minute. The child improved, and another electrocardiogram (fig. 2) showed a sinus rhythm with ST segment and T wave changes.

The next day, the heart rate increased again. Further doses of digoxin (0.05 mg. four times over a 24 hour period) were given. The heart rate then dropped to 120 beats per minute, and the next electrocardiogram (fig. 3) showed the Wolff-Parkinson-White pattern.

Thereafter, the child did well. He had no further observed bouts of tachycardia or convulsive seizures, but he had a transient 24 hour rash on the thorax and a constant low-grade temperature. Four days later, he was admitted to the University of Florida Teaching Hospital.

On admission, the physical examination showed a temperature of 36.8 C. per rectum; respiratory rate 40 per minute; peripheral pulse 150 per minute; and simultaneous flush blood pressures: 90 mm. Hg in the right arm and 120 mm. Hg in the right leg. He was an alert infant who weighed 7.3 Kg. (16th percentile), had a height of 44 cm. (75th percentile)and an impressive square-shaped head, 44 cm. in circumference (50th percentile).

The general physical examination was normal. Cardiac evaluation showed a normal-sized heart and a quiet precordium. A normal intensity widely split first sound was noted, and a normal intensity split second sound. The two components of the second sound varied normally with respiration. There was a systolic ejection click heard in the pulmonic area. A grade II/VI systolic blowing decrescendo murmur,* occupying early and mid systole, was heard maximally along the lower left sternal border. Also a superficial, harmonic type systolic murmur could be heard in the same area. At the apex there was a mid-diastolic third sound, but no definite murmur. The liver was palpated at the right costal margin. The spleen was not noted. Peripheral pulses were strong and synchronous.

During his hospitalization, he was completely asymptomatic, and digoxin was discontinued. A neurological consultant thought that the child had slow normal development. There were no focal neurological findings, and roentgenograms of the skull gave negative evidence.

Laboratory studies were normal except for a mild hypochromic iron deficiency anemia.

Cardiac Studies: A phonocardiogram showed S_1 widely split in all phases of respiration. There was a low frequency, midsystolic murmur noted best at the apex and fourth left intercostal space. The two components of S_2 were of normal intensity and varied slightly (but normally) with respiration. The electrocardiogram showed a Wolff-Parkinson-White pattern, type B, that is with QRS complexes in V_1 predominantly negative. A vectorcardiogram showed the main QRS forces to be primarily leftward, posterior, and inferior. The marked slowing of the anterior, leftward, and inferior initial forces was consistent with the pre-excitation or Wolff-Parkinson-White syndrome. The QRS loop was counterclockwise in the horizontal plane; clockwise in the right sagittal plane, and counterclockwise in the frontal plane. The T loop was discordant in the horizontal plane, but concordant in the frontal and sagittal planes. Thoracic roentgenograms showed slight nonspecific cardiomegaly.

After discharge, the infant did well until eight months of age when he had another bout of tachycardia again preceded by an upper respiratory infection. As the tachycardia continued, the child became pale, irritable, lethargic and dyspneic, with cool extremities. He was again referred to one of us (W.S.J.) who noted the child had a ventricular rate of 270 beats per minute and severe congestive heart failure.

The infant again responded to oxygen and digitalization, with the electrocardiogram the next day showing

*Based on a classification of heart murmurs using grade I through VI to express increasing intensity.

a rate of 120 beats per minute with the Wolff-Parkinson-White pattern. The child became asymptomatic and was discharged on a maintenance dose of digoxin.

The most recent evaluation was at 20 months of age. The child had developed normally and had remained asymptomatic. He has had no further observed bouts of tachycardia while on a maintenance dose of digoxin.

The auscultatory findings have not changed since the initial evaluation, and all electrocardiograms have shown the Wolff-Parkinson-White pattern.

The possibility still exists that an Ebstein's anomaly of the tricuspid valve[6] is associated with this infant's Wolff-Parkinson-White pattern.

Discussion

Several groups[5,6] doubt that a true ventricular tachycardia coexists with the Wolff-Parkinson-White syndrome. It is their contention that cases reported as such are probably paroxysmal pseudoventricular tachycardia or paroxysmal pseudoventricular fibrillation.

Herrmann, Oates, Runge and Hejtmancik[5] have listed the features that aid in distinguishing a pseudoventricular tachycardia from a true ventricular tachycardia. In the pseudoventricular tachycardias the ventricular rate is usually over 200 beats per minute. The wide QRS complexes can be absolutely regular and may be preceded by a P wave (paroxysmal pseudoventricular tachycardia); or the wide QRS complexes can be irregular (paroxysmal pseudoventricular fibrillation). On conversion of a pseudoventricular tachycardia, the electrocardiographic features of the Wolff-Parkinson-White syndrome become apparent. Also in pseudoventricular tachycardias, the patient's clinical condition usually appears better, and this type of tachycardia appears to have a more favorable prognosis. Death, however, can be the sequela of either the pseudoventricular tachycardias or the true ventricular tachycardias.

Herrmann and his associates[5] thought that procaine amide and quinidine are the drugs of choice in treating the paroxysmal pseudoventricular tachycardias. In paroxysmal pseudoventricular fibrillation, digitalis alone should not be used because it may cause a dangerous increase in the ventricular rate.[5] Digitalis usually maintains or brings out the Wolff-Parkinson-White pattern by depressing the normal conduction pathway more than the abnormal pathway. Thus, digitalis may facilitate the transmission of complexes down the anomalous pathway and thus increase the ventricular rate.

Quinidine acts on the conduction pathways in a converse manner, and thus should be given with digitalis in controlling paroxysmal pseudoventricular fibrillation. This combination of drugs would control the conduction of both the normal and abnormal pathways.

In infants with paroxysmal pseudoventricular tachycardia in whom systemic blood pressure is not easily monitored during the administration of intravenous drugs, the digitalis preparations are still probably the drug of choice. Also, most persons who deal with children have had the greatest experience with this drug. In those instances where digitalis fails to convert the arrhythmia, the other drugs may still be utilized.

Summary

A case is reported of an infant with the Wolff-Parkinson-White pattern and a rare type of supraventricular tachycardia, called paroxysmal pseudoventricular tachycardia because the QRS complexes resemble a true ventricular tachycardia.

The features that aid in the recognition of this unusual electrocardiographic entity are discussed. This case was successfully managed by digoxin alone, though other groups have found procaine amide and quinidine to be efficacious.

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Skin and Scuba Diving Fatalities

G. Dekle Taylor, M.D.
Everett H. Williams Jr., Sc.M. in Hyg.*
and G. Lindsey Chappell, B.S.**
Jacksonville

In recent years much glamour and excitement have been associated with the exploits of the skin and scuba diver. Little has been mentioned about the alarming number of fatalities resulting from this sport. Sports diving has become a recreation for millions of people throughout the world. The underwater diver equipped with the snorkle (underwater breathing tube), face mask and flippers is commonly known as a skin diver. The scuba diver descends with tanks supplying him with air. The equipment is known as self-contained underwater breathing apparatus, usually shortened to the term "scuba."[1]

In 1960 we initiated the coding of deaths in Florida due to skin and scuba diving. From January 1960 through August 1962, 37 fatalities were reported. This alarming number of deaths resulting from a recreational activity prompted our interest in making this study.

The United States Navy was requested to provide information pertaining to deaths due to skin and scuba diving. The following statement was received in reply: "During extensive operational diving, the U.S. Navy has had only 7 fatal accidents (due to skin and scuba diving) among U.S. Navy Divers during the 15 year period from 1946 to 1962." The high incidence of fatalities secondary to recreational diving as compared to the low mortality associated with the more hazardous diving in the United States Navy is noteworthy.

Methods

There is no known source of data on the number of deaths involving skin and scuba diving. State vital statistics offices use the International Statistical Classification of Causes of Death which includes diving deaths in a single category with all other accidental drownings.

A query concerning the number of diving deaths was sent to each of the 50 states, Puerto Rico and the Virgin Islands and also to four large cities. Replies were received from 91 per cent of the areas. Seven reported no deaths, nine expressed the belief that no deaths had occurred in the state, and 21 stated that the data were not available from the death certificates. Michigan and California reported the highest number of deaths (14 each) for a two year period, and Washington reported 10 for the same time period.

A similar query was sent to the Underwater Society of America and to 22 state diving councils. Of these, replies were received from only three state councils.

In January 1960, a project was started to provide statistics on diving deaths in Florida. Data were obtained from death certificates and from newspaper reports. In the period January 1960 through August 1962, a total of 36 deaths was located from these two sources. Skin and scuba diving was shown on the death certificate in 32 of these cases while the other four cases were located from newspaper reports. One additional diving death was located by sending a query to all known diving clubs in the state. Thus, at least 37 skin and scuba diving deaths occurred during the 32 month study period.

Queries to diving clubs were not very productive. Answers were received from 13 of the 43 clubs contacted, and three of the clubs listed one or more deaths. They reported 12 deaths during the 32 month study period, of which only one death was previously unlocated. It is possible that diving clubs were somewhat dubious of the queries for fear they might lead to some type of restrictive legislation.

In an attempt to obtain additional information on the known deaths, a questionnaire was sent to the coroner or physician who certified the cause of death. The questionnaire was designed to give as many details as possible concerning the diver's training, experience and ability, and also to determine the factors which probably caused the accident. The questionnaire was also sent to the informant or next of kin. Completed or partially completed questionnaires were received for 26 of the fatalities.

*Director Vital Statistics, Florida State Board of Health.
**Statistician, Florida State Board of Health.

Findings

Analysis of the 37 known skin and scuba diving fatalities in Florida during the period studied indicates that the ever increasing number of active participants in the sport appears to result in an increasing number of fatalities occurring each year. There were 10 diving deaths in 1960, 13 in 1961, and 14 during the first eight months of 1962. The fatalities were evenly distributed during the year with a little over one death per month over the 32 month period. Twelve of the deaths occurred to persons 20 to 24 years of age. There were seven deaths in the 15-19 year group, eight in the 25-29 year group, nine for persons 30 years and over, and one age not stated. All were white males.

About two thirds of the deaths (24) occurred in springs forming from underground rivers that surface through caves. These underground caves, common to North Florida, provide an intriguing and complicated land form to explore. A single cave may be composed of several small caves leading in various directions under the ground. An additional two deaths were reported to have occurred in rivers fed by one or more springs. The 11 remaining deaths were due to diving accidents in the ocean.

Of 18 questionnaires returned on deaths occurring in springs, 16 reported the divers were scuba diving with a buddy. Two additional victims had been skin diving in springs alone. Ten of the 16 scuba diving victims were using no safety line while deep in the caves; six divers using safety lines had gone beyond the end of the safety line while down in a cave.

Only a few of the victims were wearing a depth gauge or diving watch. Both instruments give a good indication of the length of time allowable under water with compressed air. In 14 cases, exhausted air supply was a major factor in the cause of the accident. Carelessness and becoming lost in the cave in which the dive occurred were important factors as well. These events occurring separately or together during a dive can easily lead to panic and loss of reasoning which would most likely result in death. It appears from the questionnaire results that the majority of accidents occurring in the springs were due to failure on the diver's part to observe rules used in diving and to lack of sufficient equipment with which to perform the dive rather than to lack of formal training.

Of the 11 fatalities on record as having occurred in ocean water, questionnaires were returned on seven which had information concerning the diving conditions at the time of death. In all seven of these instances the victim was diving with at least one other person, a diving buddy. In each case, however, the buddies did not remain together so that in the event of danger, it was not possible to notify the partner. In all accidents happening in ocean water the divers were using scuba gear, but as in the case of the underground cave deaths, none was wearing a diving watch to indicate the length of time underwater and only one was wearing a gauge to indicate depth. Thus it appears that in these fatalities also, lack of proper and sufficient diving equipment and an exhausted air supply were major causative factors, both of which could easily have been avoided with suitable precautions. Inexperience was also a factor in four of these deaths.

In addition, ocean current played an important part. The current in salt water is generally more of a problem than the current in fresh water. It is necessary, therefore, for the divers to remain close to the area where they entered the water and to avoid wandering off too far. No safety lines of any type were being used in the salt water dives, and the danger of wandering off was present.

During the 32 month period of the study, only one death occurred as a result of an attack by a shark.

The survey points up several fundamental factors. The knowledge gained from diving with a person well experienced in the sport of diving is invaluable. Too, proper training, the mastering of basic skills such as "buddy breathing" (two divers sharing the same source of air) and familiarity with the area in which the dive occurs do a great deal toward preventing panic and probable death in the event of unforeseen circumstances.

Comments

Skin and scuba diving is becoming an increasingly popular sport. It is a fascinating and healthful recreation to be encouraged. It is important, however, to publicize the dangers involved, as manifested by the fatalities shown in this report. Divers should be well trained, in good physical condition, have proper equipment and never dive alone. Only experienced divers using the greatest safety precautions should indulge in cave diving.

It is urged that increased efforts be made to record and study future diving fatalities. A com-

parison between the low fatality rate of hazardous Navy diving and the high incidence of deaths in recreational diving suggests that many of the deaths reported were preventable had the divers adhered to more rigid rules of safety. About two thirds of the deaths in Florida occurred in cave diving. On 14 of these 24 deaths, questionnaires were recorded indicating they could have been prevented had the divers had safety lines in proper use. These fatalities have largely occurred in experienced divers. The neophyte is wary of caves and is timid in his adventure while the experienced diver is more apt to take chances and ignore safety factors.

Summary

An alarming number of fatalities resulting from skin and scuba diving is reported in this study. The statistics of the Florida State Board of Health and a survey of other agencies are reviewed. Etiological factors are evaluated and methods of prevention suggested. It appears that the majority of these deaths were preventable. It is suggested that divers set more rigid safety regulations for themselves. Diving clubs should place more emphasis on sound safety programs and insist that members adhere to them.

Acknowledgment

We wish to acknowledge the assistance of Mrs. Constance Wetzel in obtaining the statistics at the Florida State Board of Health.

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Suite 221, Marshall Taylor Doctors Building.

Recruitment

Recruitment in Florida is a product of a plan endorsed by the Woman's Auxiliary to the American Medical Association in 1953. The plan was to concentrate their efforts on the organization and sponsoring of Future Nurse Clubs across the nation. It was implemented in Florida by the Woman's Auxiliary to the Florida Medical Association which achieved 10 clubs and 592 high school members in the first year.

In the beginning, activity was devoted primarily to interest girls in nursing careers by making available information on nursing and establishing scholarship programs. In a few years there evolved an ever increasing interest in health careers other than nursing. The scope of Future Nurse Clubs necessarily expanded to attract the attention of both boys and girls interested in various health-related fields. This trend has encouraged the participation of young men interested in medicine as a vocation. The identification of Future Nurse Clubs will be changed at the State Convention in April to a name which will embrace all medical-related careers.

The organization provides members with information concerning specific careers and the opportunities available in a chosen field. Many clubs participate in community service programs. Among these are hospital experience, maintainence of first-aid rooms in schools, study courses in baby sitting, and cooperation in fund raising programs. The Governor, since 1955, has proclaimed a day in honor of the services contributed by the Future Nurse Clubs.

Interest on the part of the Auxiliary in Recruitment has heightened with the result that members have provided sponsorship, club programs, field trips, and social functions all of which have encouraged the success of the clubs. Twelve county auxiliaries have active scholarship programs for students entering a medical related career. There are now 130 clubs in the state of Florida with a membership of 3500 students.

The continuing support of the members of the Auxiliary and the Florida Medical Association will insure that there will be an adequate reservoir of highly dedicated young people to meet the health needs of the expanding communities in Florida.

Mrs. Carl Van Arnam, Recruitment Chairman
Woman's Auxiliary, Florida Medical Association

Clinical Comment



Annual Arthritis Seminar

At the Third Annual Arthritis Seminar, held in the Balmoral Hotel, Miami Beach, on Oct. 20, 1962, Dr. John Gregory Mann, Department of Rheumatology, Mayo Clinic, Rochester, Minn., spoke on "Planning a Treatment Program for the Patient with Rheumatoid Arthritis." Approximately 50 per cent of patients with rheumatoid arthritis improve on any type of basic treatment. About 15 per cent will remain stationary; some 35 per cent will get worse, and it is this particular group that presents most of the problems for the patient and physician. It is important to discuss with the patient initially just what he wishes to accomplish insofar as treatment is concerned. If the patient's wishes are unrealistic, it is likely that the results will be unsatisfactory; the same will be true if the physician has no plan of treatment, or if he wishes to accomplish results hurriedly. Patient evaluation and treatment planning based on the objectives of treatment are necessary. The patient needs to know that knowledge of rheumatoid arthritis is limited, medications which will produce a cure are not known, the course of the disease is variable and unpredictable, and the disease may be articular or systemic or a combination of the two.

Objectives of treatment include maximum suppression of the active disease with minimal risk to the patient, the relief of pain, the preservation of function, the prevention of deformity, and rehabilitation. Basic treatment consists of bed rest, rest of individual joints, and medication. Medications include analgesics (primarily salicylates), phenylbutazone, steroids, and antimalarials. Local treatments include intra-articular injections of steroids, surgical treatment for the prevention of deformity, and/or reconstruction, and physiotherapy. No narcotics, including codeine, should be used. The medications used include those which are for relief of pain (analgesics), suppressive of the disease process (gold and antimalarials), and drugs which have both effects (phenylbutazone and steroids). In discussing the disease with the patient, it is wise to include the discussion of the basic problem, home problems, civic role, the patient's desired objectives, the choice of appropriate treatment including the availability of drugs and the practical use of them, a résumé of the patient's past therapeutic experiences, and enlistment of the cooperation of the patient and family.

Following presentation of hypothetical cases, Dr. Mann discussed the dangers of drugs used. The antimalarials, when used over a long period of time, may produce retinal damage with scotoma and blindness, and there is the additional possibility of corneal deposits occurring. Patients on long term antimalarial therapy should see an ophthalmologist twice a year. Chloroquine may produce temporary depigmentation of the hair. Steroid complications are well known, but he mentioned that men tolerate steroids better than women and that children tolerate steroids better than adults. One steroid should be selected and complete familiarity be obtained with it and its side effects. The choice of the speaker was prednisone. The dosage of this drug should not exceed 9 mg. daily in young males; 6½ mg. and 4½ mg. in menopausal women. Arthritis in children has a better prognosis than in adults, and conservative treatment should be used first.

A three man panel gave a discussion on disorders of calcium depositions in rheumatic disease. Dr. Alonso Portuondo, Visiting Professor of Medicine, University of Miami School of Medicine, discussed symptoms arising from the local deposition of calcium which are not related to general metabolic disturbances of calcium. These local depositions, which may occur in or around joints, usually involve the shoulders, elbows, wrists, hands or hips; rarely the Achilles tendon is involved. The symptoms may be acute or chronic. In the latter instance they are apparently due to mechanical factors. The acute type,

Under this heading, The Journal presents information gathered by Florida physicians attending the various medical meetings. The thoughts expressed are those reported by the author and are not intended as scientific references.

with pain, inflammation, redness, and limitation of motion, may be confused with gout or septic arthritis. The tenderness, however, is well localized over a very small area. In the chronic type with mechanical disturbance of joint motion, there is constant dull pain over the joint, but a full range of motion is present. This, along with the x-ray findings of calcium, differentiates it from capsulitis and periarthritis. Treatment of the acute type consists of inserting a needle into the most tender part, using Xylocaine as the local anesthetic, and using a pumping action, washing out as much calcium as possible. This procedure is followed by a local injection of steroids. In chronic bursitis, because of lack of point tenderness, the needle should be inserted with fluoroscopic correction. A similar type of calcium aspiration and steroid injection is followed, but several injections may be required to remove all of the calcium.

Dr. Harvey E. Brown Jr., Assistant Professor of Medicine, University of Miami School of Medicine, discussed multiple calcific bursitis, pointing out that it should be differentiated from the calcification of cartilage, the appearance of spurs, and the calcification of ligaments that occur as an aging process. Further differential diagnosis includes metabolic calcium depositions, ochronosis, ankylosing spondylitis, calcification of the hyaline cartilage and calcium pseudogout. The latter condition is rather rare and may mimic gout even to the extent of elevated serum uric acid. Aspiration of the involved joint, however, will reveal calcium crystals and white blood cells, some of which may be actively phagocytic. A polaroid filter aids in identifying the calcium crystals. X-rays of the joints will reveal spotty calcification in the joint space.

The third panel speaker was Dr. David S. Howell, Associate Professor of Medicine, University of Miami School of Medicine, who has just returned from a Markall Foundation Fellowship in Stockholm, Sweden. While at the Karolinski Institute for Cell Physiology, he developed methods for ultramicroscopic analysis of tissue undergoing calcification, and these methods were applied to the relation of the role of sulfated mucopolysaccharides and the development of calcium deposits in rheumatic disease.

A most interesting luncheon address on research was given by Dr. Thomas P. Carney, Vice President of the Eli Lilly Company, Indianapolis, Ind.

At the afternoon session, Dr. Frank T. Murphy, Department of Orthopedic Surgery, Watson Clinic, Lakeland, discussed the orthopedic aspect of arthritis with emphasis on current developments. In his introduction, he mentioned that there is currently an increased interest in orthopedic reconstruction of arthritic joints and that the time relation for carrying out orthopedic procedures is changing with earlier surgery on quiescent joints, even though there may be current activity elsewhere in the body. He also mentioned the use of cortisone in surgery and the necessity of the team approach to surgical treatment, stressing that the orthopedic procedure is only one facet in the general management of the disease. Surgical procedures include: acromioplasty, excision of the head of the radius, arthroplasty, arthrodesis, correction of subluxation, relocation of tendons, synovectomy, and selective arthrodesis, osteotomy, prosthetic applications, tendon lengthening, and capsulotomy. Miscellaneous procedures include joint injection with steroids, cyst excision, removal of loose bodies and treatment of rheumatic nodules. Dr. Murphy specifically discussed the treatment of tendonitis of the shoulder which requires multiple injection of the rotator cuff, and the carpal tunnel syndrome which can also be relieved by local injection of steroids.

Dr. Darrell C. Crain, Associate Professor of Clinical Medicine, Georgetown University School of Medicine, Washington, D. C., discussed "Ten Steroids Available, Which One Is Really the Best?" He emphasized that steroids have a place in rheumatoid arthritis. He then reviewed the pharmacology, the history of steroids, and the various effects and side effects which have been produced through changes in the steroid molecule by chemistry. His choice was prednisolone for most effective antirheumatic activity and lowest cost. It was Dr. Crain's opinion that steroids should be used earlier in the older age group since long term side effects are not major considerations. In response to questioning, he mentioned that only one-half of 1 per cent of the arthritic patients treated by him are started on steroids initially. He did not, however, advocate waiting until the patient is bedridden to start treatment. Minimal doses should be started with gradual increment in dosage as necessary. There is some increase in the incidence of posterior capsulary cataracts in steroid-treated arthritic patients, but the exact incidence is not known. He thought

that an occasional injection of ACTH during the course of steroid therapy might be of value. His 12 salient points of steroid therapy were: start with prednisolone, one-half tablet three times a day, spaced at about 8 a.m., 2 p.m. and 10 p.m.; if satisfactory control is obtained, continue for one week and then begin to cut back; if satisfactory control is not obtained, increase the morning dose to 5 mg. for one week. If adequate control is still not obtained, increase the afternoon dose to 5 mg.; do not exceed a total of 12½ mg. at any time; if satisfactory control is not obtained, or if the condition is at first controlled and later is not, shift to another steroid, either methyl prednisolone or fluprednisolone. If the patient suffers persistent gastric distress, shift to methyl prednisolone; if excessive fluid retention develops, shift to triamcinolone until relieved, then to another steroid; if loss in weight occurs and weakness develops, shift to dexamethasone; if excessive gain in weight develops, shift to fluprednisolone; if excessive skin ecchymoses develop, shift to cortisone; if psoriasis is present, use triamcinolone; if excessive facial mooning occurs, shift to fluprednisolone.

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Orlando

Southeastern States Cancer Seminar

On November 15, 16 and 17, 1962, the Eleventh Biennial Southeastern States Cancer Seminar was held in West Palm Beach. This seminar was presented by the Palm Beach County Medical Society, the American Cancer Society, Florida Division, Inc., and the Florida State Board of Health and was approved by the American Academy of General Practice, Category 1, 18 hours, and the Committee on Postgraduate Education of the Florida Medical Association.

Foremost authorities on cancer were gathered together to bring to physicians and dentists of the Southeast the latest information in cancer control. Abstracts of the papers of the seminar faculty follow.

Dr. John K. Frost, Associate Professor of Pathology, Johns Hopkins University School of Medicine, and Director of Cytopathology, Johns Hopkins Hospital, presented the subject of Gynecological Cytology. Dr. Frost discussed the cytologic findings of normal cells as compared with abnormality as to size, shape and nuclear content of abnormal cells. He then considered the physiological changes of cells of the vagina and the effect of hormones on the vaginal cells. In the senile atrophic vagina the parabasal cells will be predominant while in the pregnant woman 95 per cent of the cells will be of the superficial variety. Normal cytology has a uniformity of the material microscopically. It is sharp in detail. The normal tissue of the cervix is a stratified noncornified squamous epithelium which has three distinct types of cells; parabasal, intermediate, and mature. The number of these cells which are shed from the cervix varies according to conditions. The following are some examples:

	Counting 100 Cells
Pregnancy (95% intermediate)	0/95/5
Neonatal child (100% parabasal)	100/0/0
Postpartum	90/10/0
Childhood	90/10/0
Estrogen effect (shift to right)	0/100/0
Estratrophy	0/100/0
Teleatrophy	100/0/0

Invasive and noninvasive cancer can show a cytological difference. Early carcinoma of the cervix is usually found in the canal while later cancer is on the portio vaginalis of the cervix. Adenocarcinoma shows an extreme lack of uniformity of normalcy in cytological diagnosis. Later cancer is decreasing; 85 per cent is stage 0 to I and 10 per cent III to IV.

The vaginal pool is of value in detecting endometrial cancer; 75 to 90 per cent of endometrial cancer is found in the vaginal pool as opposed to only 20 to 40 per cent in material from the cervix. Ovarian tumor cells can be detected in the vaginal pool; one third of the ovarian cancers shed cells. Dr. Frost also mentioned that infection and radiation have an effect on gynecological cytology. Occasionally the lesions of the ovaries may drop cancer cells into the vaginal pool by way of the tubes. Many lesions of the genital tract can be detected by a careful study of the vaginal and cervical cytology.

Dr. Langdon Parsons, Professor of Gynecology, Boston University School of Medicine, gave a most practical talk on the Diagnosis and Management of Ovarian Tumors. Whatever the practicing physician's particular sphere of interest, the early

recognition, proper diagnosis and management of ovarian tumors are a recurring problem. They are not pathological entities that concentrate in teaching centers, but are constantly being encountered in the physician's examining room and in the operating rooms of small hospitals throughout the country. Early recognition and institution of proper therapy are becoming a matter of increasing importance since more women are now reaching the age group in which malignant ovarian neoplasms are prone to occur. At the present time one out of every hundred women will have a malignant tumor of the ovary.

Through education of the medical profession and the lay public much has been accomplished in the early detection of cervical cancer. Unfortunately, little progress has been made in the recognition of ovarian cancer at a time when it can be treated with a maximal expectancy of cure. There is a large element of confusion in differentiating between a physiological cyst and a true neoplasm which compounds when the physician attempts to differentiate between a benign and a malignant neoplasm. If there is to be any progress in the treatment of ovarian cancer, it must be recognized in its earliest stage and the physician must be prepared to offer the individual patient the best in therapy. To this end the discussion concerned itself with the pitfalls in diagnosis and management of ovarian tumors.

Dr. Walter T. Murphy, Director of Therapeutic Radiology, Roswell Park Memorial Institute, Buffalo, N. Y., next discussed the Management of Vaginal Cancer, Primary and Secondary. Dr. Murphy said that cancers which arise in the vagina have a good prognosis when treated by radiation therapy. During the years 1919 to 1955, 161 patients with squamous cell carcinoma in this location were irradiated at the Roswell Park Memorial Institute. Their average age was 57 years. Four were under 40 years of age and 27 were over 70 years. The youngest patient was 34 years old. Symptoms consisted of vaginal discharge, either watery or bloody. The average duration of symptoms in these patients was seven months. Ten of the patients were asymptomatic, and the lesion was diagnosed during routine examinations.

The five year cure rate in the entire group was 27 per cent. An analysis of the patients treated since 1940, when more modern x-ray equipment became available, revealed that 21 out of 57 patients (37 per cent) were cured. In this group, when the cancer was limited to the vagina, 16 out of 27 patients (59 per cent) were cured. Even in patients with extensive lesions which had spread beyond the vagina, the cure rate in these latter years was 20 per cent. In most patients the cancer cure is consistent with normal pelvic functions.

Cancers which arise in other organs and spread to the vagina, for example, from the uterus, are much less favorable for treatment because the vaginal metastasis is usually only one of many other locations of spread. Even in many of these cases, however, modern radiation therapy can control the vaginal lesion, or at least provide palliation for a considerable length of time. This therapy in all situations is individualized to the particular problem of the patient. Therapy may be carried out by external radiation sources, for example, x-ray generators, or by means of radium applicators or radium needles. Often a combination of external radiation sources and local radium sources is necessary in order to obtain the best result.

Dr. James H. Ferguson, Professor of Gynecology and Obstetrics, University of Miami School of Medicine, then moderated a most interesting panel discussion, with Drs. Parsons, Frost and Murphy as the panel members, on the subject of Carcinoma of the Uterine Cervix. The discussion covered so-called borderline lesions of the cervix, known as microinvasion or superficial invasion. Dr. Ferguson preferred to treat such lesions as intraepithelial carcinoma is treated. Dr. Murphy discussed radiation sensitivity and radiation resistance, and Dr. Parsons indicated his choice of biopsy of the cervix to be by the cone method.

Cytology of Gastrointestinal Cancer was expertly discussed by Dr. Frost. He covered the areas where cytology could be used to advantage as the mouth, esophagus, stomach and colon. The cytological studies are most valuable in the mouth. Late lesions of the stomach and colon can be detected by cytologic methods. One method used in the stomach is insertion of the Levin tube in which several small holes are cut to obtain washings which are centrifuged and immediately fixed.

Next on the program was Dr. Robert J. Izant, who spoke on Abdominal Malignancy in Infancy and Childhood. Dr. Izant is Assistant Professor of Pediatrics and Pediatric Surgery at Western Reserve University School of Medicine. He discussed the types of abdominal masses most commonly occurring in children, their differential diagnosis and treatment. It was emphasized that any abdominal mass in a child should be regarded as a neoplasm until proved otherwise.

Dr. George E. Moore, Director of Graduate School and Chief of Surgery Research, Roswell Park Memorial Institute, ably moderated a panel on Palliative Management of Advanced Abdominal Malignancy with Drs. Izant, Frost, Woodward and Murphy as the panel participants.

Dr. Edward D. Thomas, Physician-in-Chief of the Mary Imogene Bassett Hospital, Cooperstown, N. Y., spoke on Bone Marrow Transplants in Treatment of Neoplastic Disease. Most work has been conducted with dogs. Isogenic marrow transplants in dogs with 2 to 3 x irradiation to the bone marrow (600 to 1500 r) result in the death of the dog in eight to 12 days. If bone marrow is replaced early by an infusion of the dog's own bone marrow, there is a marked response and a rapid recovery with the dog out of danger in about 15 days. Late effects in the dogs have been few with no cataracts. Some have regained fertility and are now four years older.

Clinical application was illustrated by a case report of twins, in one of whom acute leukemia developed. She had been treated with chemotherapy. She was given 1100 r of whole body irradiation. The white blood cell count fell. She was given an infusion of bone marrow from her twin. There was gradual recovery. The child lost some of her hair. She had a total remission for three months, but the leukemia returned in five months after treatment, and she died 15 months following therapy, from leukemia.

Alogenic transplants, following irradiation and infusion of bone marrow, result in death to most dogs on the fifteenth day. Some dogs live much longer and later die of complications. If they live as much as 120 days, they are most likely to recover completely.

Isogenic bone marrow of animals and man can be stored well at about 80 F. for an indefinite period. This may be a useful technique which may protect the patient during chemotherapeutic procedures in the future.

Dr. Warren H. Cole, Professor and Head of the Department of Surgery, University of Illinois College of Medicine, talked on the subject of Immunology and Chemotherapy of Cancer. Although medical scientists have not been able to prepare vaccines or antibodies for effective use in the treatment of human cancer, numerous scientists have prepared such agents in the treatment of animal cancer. One of the first persons to prepare an effective vaccine was Dr. Charlotte Friend (1957) of Sloan-Kettering Institute. She used the spleen of infected mice (leukemia) as an antigen and injected a filtrate of the homogenized spleen into rabbits. After several injections, she collected the serum from these rabbits 14 to 21 days after the last injection and inoculated the mice at the same time the infected filtrate was injected. She noted that leukemia developed in only 7.2 per cent of animals receiving the "immune" rabbit serum at the time of injection of the filtrate compared to 84 per cent of the controls. Similar favorable results were reported by Schwartz and his associates. Stewart and his associates (1959) reported the preparation of a vaccine against the polyoma virus which produces tumors of various types when injected into C3H mice. They utilized antigen prepared from fresh mouse embryo and tumor virus to which Freund's adjuvant was added. Rabbits were injected at weekly intervals three or four times from the serum obtained from these animals. This antiserum was effective in protecting newborn mice inoculated with the virus.

McKee and his associates (1959) reported the successful immunization of C57 BL mice against Ehrlich's carcinoma by giving five to 10 injections of Ehrlich's cancer cells which had been irradiated with 2000 to 4000 r. Of 70 mice so immunized, 50 survived the challenge with viable untreated Ehrlich cells. All 35 of the mice receiving eight immunizing injections survived. All of the mice receiving 0.05 ml. of nonirradiated dose (about 100,000 cells) died.

Dr. Cole and his associates prepared antibodies in rabbits and sheep against Walker 256 cells in rats. The antiserum was prepared by injecting these cells into rabbits or sheep three or four times, and then bleeding the animals to obtain serum which was fractionated. When certain fractions of globulins were inoculated into rats at the time of inoculation of fresh Walker 256 cells, they found that the "takes" were reduced from 100 per cent to 40 per cent. When the fractionated globulin was given to rats 17 days after inoculation of fresh Walker cells, the growth of the tumor was sharply inhibited, but none of the rats were cured of their tumor. The experiments reported made Dr. Cole optimistic that some day it will be possible to prevent or treat human tumors with vaccines or antiserum.

Since the introduction of nitrogen mustard as an anticancer agent in 1942 by Goodman, Gilman and their associates, perhaps 200,000 anticancer agents have been investigated. Three or four hundred of these have shown variable favorable effec-

in animal tumors, and 25 or 30 a favorable effect in human tumors. None of these, however, can be considered curative except possibly methotrexate in the treatment of choriocarcinoma as reported by Hertz and his associates. Of the various agents recently introduced, 5FU and FUDR are probably the most effective in solid tumors. All of the anticancer agents are toxic to human beings. The most significant toxicity is perhaps the destruction of bone marrow. Unfortunately, the drugs are not very effective unless they are given in such large doses that toxicity develops. If the white blood cell count drops below 1,000 during therapy, all anticancer therapy must be stopped and steps taken to prevent the ill effects, the leukopenia. The primary ill effect is the increased susceptibility to infections.

Since these anticancer agents are not curative in themselves, new methods have been developed in their use. For example, during the past five or six years, extensive experiments have been conducted by the group at the University of Illinois and by numerous institutions under the sponsorship of the National Cancer Institute, giving anticancer agents at the time of operation. The principle behind this prophylactic or adjuvant program is the destruction of cells which might be dislodged at the time of the operation, or might have been dislodged so recently that they do not yet have an effective vascular attachment. It might also be assumed that anticancer agents might be effective when given to patients who have had operations several years previously, but have dormant cancer cells. Under this circumstance of dormant cancer cells, when it might be assumed that the patient's own resistance is sufficient to keep the cells in a quiescent state, it seems possible that anticancer agents might have a lethal effect on the cells. In the clinical studies at the University of Illinois and the studies reported from the National Cancer Institute adjuvant group, the procedure has been effective in cancer of the breast, but not in cancer of the colon or rectum. In about 80 patients with cancer of the breast, given the drug (nitrogen mustard) at the time of operation, there were 13 deaths from cancer compared to 20 deaths from cancer in the group having radical mastectomy alone. Additional drugs are being tried in this study, Dr. Cole reported.

Regional perfusion, as popularized by Creech and his associates, is being used by numerous groups throughout the country. They have recently reported on the use in 350 patients. This method is most adaptable in tumors of the extremity. They obtained their best results in patients with melanoma; 80 per cent of these were improved. Of the entire group, improvement was noted in 68 per cent. No claim for cure is made. They reported that some of the deaths were related to the therapy because of the toxicity of the drugs. They have used numerous drugs in this procedure, particularly phenylalanine mustard.

Arterial infusions, popularized by Sullivan, are likewise being used by numerous groups throughout the country. Arterial infusion has an advantage over perfusion insofar as the tumor area can be exposed to the drug over a period of several days. For the most part he has used methotrexate, and has given citrovorum as an antidote to neutralize the methotrexate escaping into the venous system as it has passed through the tumor. Sullivan recently reported a dramatic case in the Journal of the American Medical Association in which an inoperable carcinoma of the tongue disappeared after infusion. It recurred five months later, but again disappeared following another infusion. At the time of the report, there had been no recurrence for 10 months, but one would expect it to recur again.

Dr. Cole said, "We are, of course, hoping that more effective drugs will be discovered and we know they will be. We have no way of predicting when and if curative agents for several tumors will be found."

Dr. Moore presented a most comprehensive discussion on the Spread of Tumor Cells in the Body. In the majority of instances cancer is a systematic disease. For this reason, the factors determining the spread and growth of cancer cells are of greatest importance. The inherent characteristics of individual cancers which are important include cell to cell adherence, local tissue pressure, contact relations between normal and malignant cells, cell motility, general tissue motility, tumor vascularization, and the sum of all cytophysiological functions of an individual cancer cell which permit its survival, growth and rapid multiplication.

The extent of the systemic distribution of cancer cells from different kinds of malignant disease has been difficult to assess because only a varying small fraction of cancer cells and cell clumps — probably less than 1 per cent — ever survive and develop into microscopic metastases. By cytological techniques the distant spread of cancer cells by the following routes has been reported: lymphatics, regional and peripheral circu-

lation, body cavities, pleural lumina of hollow organs and mechanical implantation, "natural" and iatrogenic.

Controversy as to whether mechanical distribution factors or local tissue environments are more important in the determination of metastatic growth sites has been blunted by the recognition that the problem is extremely complex. It seems increasingly evident, however, that the "soil" aspects are more important. There is evidence that trauma, inflammation, alteration in thrombotic phenomena and perhaps "cellular principles" influence the survival of the single cancer cells which have been caught in capillaries of various organs. Metastases from metastases are extremely rare.

"Dormancy" of cancer cells is a definite clinical entity. The circumstances which permit cell survival without multiplication for many years are puzzling. Systemic factors influencing the spread and growth of cancer cells include reduction in host resistance factors, cortisone, and endocrine stimulation of hormone-dependent tumor cells. Dr. Moore stated that perfusion and infusion techniques are being used, but that in his opinion they have little practical value at this time.

Dr. Saul C. Kay, Professor of Surgical Pathology, Medical College of Virginia, Richmond, presented the next paper of the seminar on Soft Tissue Tumors. Dr. Kay discussed a study of 84 cases of soft parts sarcoma treated at the Medical College of Virginia during an eight year period. He defined the soft parts and presented a classification of the various types of sarcomas, together with illustrations of the specific types. With the aid of careful follow-up studies on these 84 cases, an evaluation of the prognosis of each type of sarcoma was attempted. A discussion of the surgical approach to the lesions was given, with comments on the role of the pathologist in aiding the surgeon to obtain the best possible results.

Dr. E. R. Woodward, Professor and Chairman, Department of Surgery, University of Florida College of Medicine, presented the subject of Gastric Carcinoma. Dr. Woodward said that cancer of the stomach has been on the steady decrease in the United States for more than 25 years. The decline has been so spectacular, in fact, that a number of hospitals have reported a drop in excess of 50 per cent since 1952. By way of contrast, death from cancer of all types has been on the incline during the same period of time. This divergent trend has not been confined to the United States alone, and comparable statistics have been obtained from Holland, Norway and Great Britain.

Attempts to clarify this dramatic change from an epidemiological point of view have not met with notable success. At various times, dietary and hereditary factors have been implicated, as have infectious organisms, chronic and specific irritations, internal inciting factors such as hormones, and premalignant conditions such as gastric ulcer, chronic gastritis, gastric polyps, and absence of acid in the stomach. While under certain circumstances one or more of these factors can be incriminated, for the present at least, evidence is insufficient to single out any one of them as a prime mover in the cause of gastric carcinoma.

Despite the genuine decrease in the incidence of this disease, it continues to remain secondary only to malignant disease of the lower bowel in frequency of tumors of the gastrointestinal tract. While intensive efforts have been made on a number of fronts to clarify the causes and to effect a respectable cure rate, and while vast improvements have occurred in diagnostic techniques and education of the public, the salvage rate in diagnosed cancer of the stomach continues to remain extremely low. For this reason the disease remains one of the more compelling challenges to the clinician and researcher.

It is frequently pointed out that the death rate for this disease may increase as the average age of the population is elevated, unless a fresh approach to treatment and diagnosis is instituted. It appears that progress has gone about as far as it can insofar as surgical ablation of the disease is concerned, and since diagnostic acumen is already very high in terms of differentiating this malignant state from benign conditions of the stomach, there appears little more to be gained on that front. Dr. Woodward quoted a recent editorial from a prestigious surgical journal, "The striking decrease that has occurred in the frequency and incidence of gastric cancer is adequate proof that gastric cancer is not inevitable and must be associated with environmental factors. These must be identified." He expressed the hope that greater energy will in the future be expended in that direction.

Dr. George T. Pack, Attending Surgeon, Memorial Center for Cancer and Allied Diseases, and Associate Professor of Clinical Surgery, Cornell University Medical College, talked on the subject of Principles of Management of Soft Parts Sarcomas. Dr. Pack discussed the classification of soft somatic tissue tumors. As to diagnosis, a biopsy should be made before the treatment is planned If the tumor is small, an excisional biopsy can be

carried out; if large, an aspiration biopsy can be carried out to determine if it is benign or malignant. If it is malignant, then other factors will influence the surgeon in the type of adequate treatment. This finding will influence resection or amputation as may be indicated. Frozen sections are taken at the time of operation with tourniquet in place. If amputation is indicated, then one should amputate above the tourniquet. One should never cut into these tumors unless absolutely necessary. In selecting the level of amputation, one should amputate above the level of origin of the muscle or the fascia involved.

Benign tumors (desmoma) sometimes destroy the patient. Plantar fibromatosis is a benign lesion. With regard to the distribution of fibrosarcomas to the arms, back, trunk and legs, some begin as plantar fibromas growing up the leg. Excision includes taking out muscles from the point of origin to the point of insertion of the muscle.

Malignant synovioma is most often present around joints and on hands and feet. Usually it requires amputation because of its malignant tendencies.

Many liposarcomas are radiosensitive, and radiation may be used preoperatively in large tumors. Metastases to the lungs, if limited to one lobe, may be treated by segmental resection or by lobectomy. The sooner congenital sarcomas are found and adequately treated, the better the progress.

Dr. Daniel Martin, Associate Professor of Surgery, University of Miami School of Medicine, moderated a panel on Malignant Melanomas. Drs. Pack and Kay acted as panel members. Dr. Pack observed that pigmented nevi on the soles of the feet and on the scrotum are of the junctional type. If they persist after the age of four or five years, he recommended excision. Dr. Kay stated that if a lesion is truly "juvenile melanoma," one need have no fear of it. Dr. Pack pointed out that melanoma in the Negro is rare. A hairy nevus may become malignant, however, and when it does the hair drops out. In cases with a clinically positive node, the prognosis may be poor with about 22 per cent one year survival. Excisional biopsy may be performed on malignant melanoma under local anesthesia. One should not inject into the tumor, and one should leave wide skin margins. If the biopsy is reported positive, the patient may again be admitted for three dimensional resection taking out a block of tissue down through the fascia. Dr. Pack indicated that he does not necessarily perform routine elective nodal dissection. If performed, it should be done immediately rather than after a waiting period. The popliteal glands drain the sole of the foot.

Systemic chemotherapy has not been too successful. Occasionally one obtains regression of skin nodules and pulmonary metastases; however, this is usually a transient response.

Dr. O. H. Beahrs, Head, Section Division of Surgery, Mayo Clinic, discussed the Surgical Management of Intra-Oral Carcinoma. Dr. Beahrs reviewed the history of the management of head and neck lesions, first cancer surgery, then radiology and now a return to surgery. Metastases usually occur in an orderly fashion in cancer of the tongue, spreading to the side involved, and justify a neck dissection on the side of involvement. Dr. Beahrs presented some statistics on carcinoma of the tongue as to location, size and type of treatment.

Classification	5 Year Survival
Grade I	80%
Grade II	56%
Grade III	23%
Grade IV	8%
Location of Lesion	**5 Year Survival**
Anterior 2/3 of tongue	51%
Posterior 1/3 of tongue	27%
Size of Lesion	**5 Year Survival**
Less than 3 cm.	49%
3 cm. or greater	24%
Type of Treatment	**5 Year Survival**
Surgery	59%
Radiation	21%
Nodes negative	60%
Nodes positive	17%
Neck dissection	45%
Nodes negative	69%
Nodes positive	27%
No Neck Dissection	36%

Adequate treatment is required. If Grade I, the lesion can be excised. If the lesion is Grade III, a hemiglossectomy will probably be necessary. Lesions in the exact midline create a problem and may require resection of the angle of the mandible and the floor of the mouth. Delayed reconstruction procedures are best carried out in six months or a year. Many patients adjust physiologically to their deformity. Preoperatively, irradiation is not used routinely. Results will depend on adequate treatment at an earlier time.

Dr. Pack then discussed Malignant Melanoma of the Head and Neck — Study of 185 Cases. Melanoma is more frequent on the scalp. This lesion occurs more often in the male than in the

female, except on the face, and at an earlier age. The highest frequency in males is in the 30 to 40 year period, and in females, the 50 to 60 year period. Etiological factors are trauma and exposure to sunlight; however, many of the lesions are on the soles of the feet, frequently in hot climates. Sunburn, frostbite and the complexion of patients are factors. Pale blonds make up 8 per cent and redheads 3 per cent of the total population, and 55 per cent of patients with melanoma are found in these two groups.

Lesions of children are ordinarily removed prior to the child going to school. Many junctional nevi regress and become arrested. Most treatment is too conservative. Amelanotic melanoma does occur and is highly malignant. The scalp is a poor location for melanoma with a low cure rate, especially if it is in the midline. A discussion on the treatment ensued, illustrated by slides.

Distant metastases are possible by the blood stream and may skip the local nodes.

Heart	24%
Stomach	41%
Brain	38%

An ashen grey complexion may indicate a melanomatosis. Sometimes irradiation lowers the tissue resistance, and melanoma recurs in the field of irradiation.

Poor Prognosis
1. Invasive type
2. Ulcerated
3. Larger than 25 cm.
4. Situated on scalp
5. Associated pregnancy
6. Metastases to regional nodes
7. Satellitosis

Good Prognosis
1. Superficial
2. Nonulcerated
3. Situated on face
4. In the nonpregnant female
5. Small in size and not metastatic

The last session of the seminar was a panel on Carcinoma of the Thyroid. The moderator of this session was Dr. Joseph J. Zavertnik, Assistant Professor of Surgery, University of Miami School of Medicine. Drs. Beahrs and Kay acted as panel members. A thorough discussion of carcinoma of the thyroid ensued.

James E. Fulghum, M.D.
Jacksonville

Florida Society of Anesthesiologists

The three components of the scientific sessions of the fall meeting of the Florida Society of Anesthesiologists, held at Winter Park on Oct. 6, 1962, were: (1) Electronarcosis, presented by Dr. Perry P. Volpitto, Medical College of Georgia, Augusta; (2) Mortality Round Table Discussion, featuring Dr. Paul E. Brady, Dr. Volpitto, Dr. J. S. Gravenstein (University of Florida) and Dr. Harold Carron, and moderated by the program chairman, Dr. J. Thomas Atkins; and (3) Mass Casualties, presented by Dr. Haven M. Perkins, Instructor in Anesthesiology, University of Florida College of Medicine.

Dr. Volpitto reviewed the history of electronarcosis and detailed his department's experiences in related research. He highlighted his talk by an excellent sound and color film depicting this research. His conclusion was that although this method effectively anesthetizes most dogs, its adaptation to humans is at present unsatisfactory. The mortality panel discussed three cases, presenting various points of view as to technique and etiology in certain pathological aspects of the cases reviewed. Dr. Perkins' paper on mass casualties was based largely on the effects of nuclear bombs on populous areas and the approaches to insuring the stockpiling of therapeutic materials and to the training of ancillary personnel to perform special duties under medical supervision in such events. The lecture was accompanied by very sobering data and slides.

The attendance at these sessions was the highest in the history of the society.

James D. Beeson, M.D.
Jacksonville

The case presented here provides the subject for the Problem Case Panel on the program of the Association's Annual Meeting, May 16-19 at Hollywood-by-the-Sea. The case was prepared by Dr. William F. Enneking of Gainesville who also serves as moderator of the panel. Participants include Drs. W. Dean Warren, Miami; Thomas W. Dorr, Tampa; Robert W. Greenwood, Sarasota, and James B. Strachan Jr., Jacksonville.

Problem Case Panel

Case Summary

A 38 year old Negro man was involved in a bus accident at approximately 7:30 a.m. on May 3, 1962, and arrived in the emergency room of the University of Florida Teaching Hospital at 10:15 a.m.

Physical Examination on Arrival in the Emergency Room.—The blood pressure was 90/54 mm. Hg and the pulse rate 118. The patient was comatose. HEENT: There were lacerations over the left forehead. The pupils were constricted and fixed. The tympanic membranes and external auditory canals were clear. The neck was supple without pain. The trachea was midline. The lungs were clear bilaterally. Heart: Sinus arrhythmia was present. Abdomen: The liver, kidneys and spleen were not felt. The abdomen was tense with slight generalized tenderness greatest in the epigastrium. Bowel sounds were active. There was no tenderness over the costovertebral angles. Extremities: The following fractures were noted: A midshaft fracture of the left humerus, an open fracture with posterior dislocation of the right elbow, and supracondylar fractures of both femora. Pulses were intact peripherally except for absence of the right posterior tibial. Neurological: The patient moved all extremities, and responded to pin prick throughout. No abnormal reflexes were noted.

Laboratory Data on Admission.— The hematocrit reading was 32. Urinalysis revealed a trace of protein, no sugar, and red blood cells innumerable on microscopic examination. The hematocrit level on May 4 was 42. Culture of the peritoneal cavity revealed Streptococcus viridans.

Course.— The patient was given intravenous fluid therapy and tetanus toxoid, and his blood was cross matched for whole blood. An indwelling catheter was placed in the bladder, and he was transferred to the intensive care unit in anticipation of an operative procedure for the open fracture dislocation of the right elbow, and manipulation and immobilization of his multiple fractures.

His sensorium cleared, and he began to complain of abdominal pain. Repeat examination revealed abdominal distention and generalized tenderness without rebound, most marked in the left upper quadrant. Bowel sounds were now absent. The blood pressure was 70/0 mm. Hg, and a diagnosis of ruptured viscus, most likely the spleen and possibly the bladder or intestine, was made. Blood transfusions were begun. On x-ray examination, an emergency intravenous pyelogram, abdominal and chest films, and films of the extremities were obtained. Chest x-rays revealed clear lung fields without evidence of pneumothorax or hydrothorax. Multiple rib fractures involving the fourth, fifth, sixth and seventh ribs on the right, and the third, fourth, fifth and seventh ribs on the left were noted.

There was slight generalized haziness in the abdomen. In addition to the previously noted fractures, x-rays revealed a fracture of the neck of the right femur, of the left acetabulum, and of the left scapula.

At laparotomy, generalized peritonitis secondary to a rupture of the jejunum was present. There was a retroperitoneal perinephric hematoma on the right side but no pelvic hematoma. The remainder of the intestinal contents were intact. A wedge resection of the perforated portion of the jejunum was performed. Following closure of the

abdomen without drainage, Steinmann pins were placed in the left olecranon and both tibial tubercles for skeletal traction.

Postoperatively, the patient experienced increasing respiratory difficulty, and a tracheotomy was performed in the recovery room. Shortly after placement of the tracheotomy, he suffered a cardiac arrest. He was given external cardiac massage, intracardiac adrenalin, and artificial ventilation, with immediate resumption of spontaneous heart beat. He was quite responsive following resuscitation, and it was estimated that the period of asystole lasted less than one minute. He was thereafter maintained on the Byrd respirator.

The following morning at 7:30, moist rales were noted over both lung fields, and the patient was given 0.5 mg. of digoxin and 500 mg. of aminophylline intravenously. At 11:00 a.m. the patient was taken off the Byrd respirator for cleaning of the tracheotomy tube and suffered another cardiac arrest. He was resuscitated and given 0.5 mg. of digoxin and 500 mg. of aminophylline, and rotating tourniquets were applied. Fifteen minutes later a second cardiac arrest occurred from which the patient could not be resuscitated.

William F. Enneking, M.D.

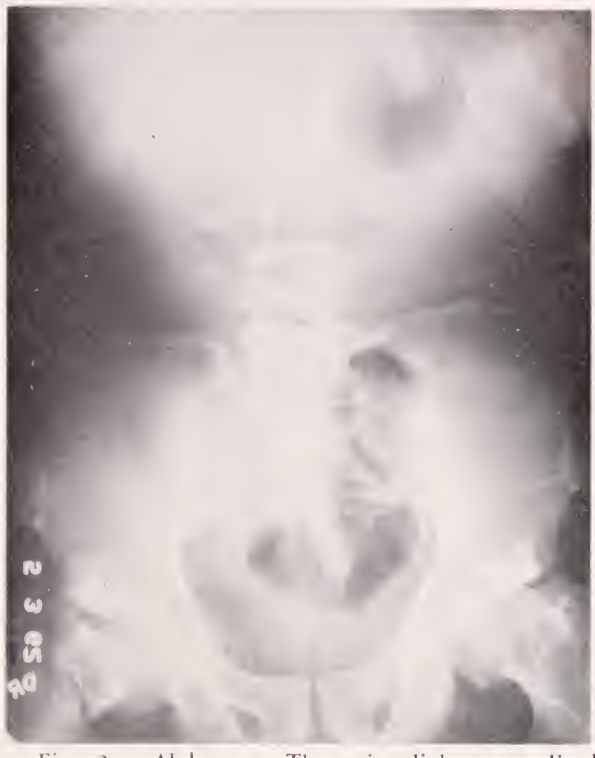


Fig. 2. — Abdomen: There is slight generalized haziness. The greater curvature of the stomach is slightly elevated. There is gas in a single loop of small bowel in the midabdomen. There is a fracture of the left eleventh rib, of the neck of the right femur, and through the left acetabulum.



Fig. 1. — Chest: The lung fields are clear, without evidence of pneumothorax or hydrothorax. Fractures involve the right fourth through seventh ribs and left third, fourth, fifth and seventh ribs.



Fig. 3. — Left Lower Extremity: X-ray shows a comminuted supracondylar fracture.

(Continued on next page)



Fig. 4. — Right Lower Extremity: X-ray shows a comminuted supracondylar fracture.



Fig. 6. — Right Elbow: There is a fracture through the articular surface of the ulna with avulsion of the olecranon.



Fig. 5. — Left Humerus: There is a short oblique fracture of the midshaft of the humerus, with rotation and angulation.



Fig. 7. — Chest x-ray 24 hours following injury shows patchy infiltrate throughout the lung fields, most marked at the bases. There is increase in pulmonary vascular markings. The left scapular fracture and rib fractures are apparent.

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Association News

Speakers Announced for Eighty-Ninth Annual Meeting May 16-19, Hollywood-by-the Sea



Dr. Enneking

Problem Case Panel

Dr. William F. Enneking, Gainesville, Moderator.

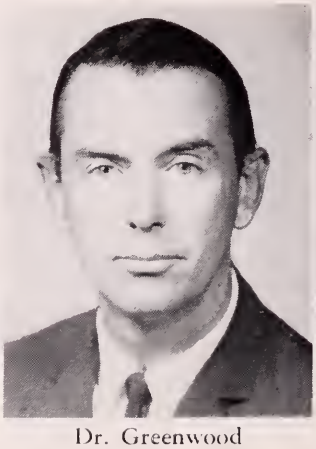
Participants include Dr. W. Dean Warren, Miami; Dr. Thomas W. Dorr, Tampa; Dr. Robert W. Greenwood, Sarasota, and Dr. James B. Strachan Jr., Jacksonville. Presentation on Thursday afternoon, May 16.



Dr. Warren



Dr. Dorr



Dr. Greenwood



Dr. Strachan



Dr. Smith



Dr. Moody

Individual Papers

Dr. J. Lawton Smith, Miami, "The Ophthalmodynamometric Carotid Compression Test," and Dr. James D. Moody, Orlando, "Carotid Endarterectomy-Stroke Prevention."



Dr. Verner



Dr. Roberts



Dr. Marriott

Dr. John V. Verner Jr., Lakeland, "The Diagnostic Spectrum of Hypercalcemia;" Dr. H. J. Roberts, West Palm Beach, "The Syndrome of Narcolepsy and Functional Hyperinsulinism," and Dr. Henry J. L. Marriott, Tampa, "Electrocardiographyogenic Suicide and Lesser Crimes." Presentations on Thursday afternoon, May 16.



Dr. Mixson

Obstetric-Gynecologic Symposium

Dr. William T. Mixson Jr., Coral Gables, moderator.



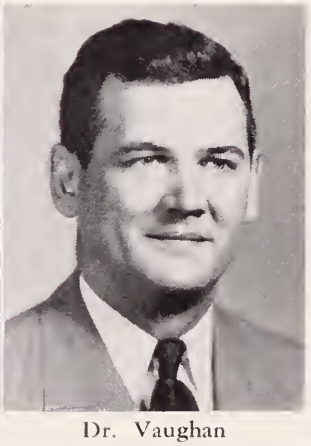
Dr. Lay



Dr. Duckett



Dr. Wallace



Dr. Vaughan

Participating in the Obstetric-Gynecologic Symposium will be Dr. Coy L. Lay, Lakeland, and Dr. Howard C. Duckett Jr., Jacksonville, who will discuss the "Medical Aspects of the Treatment of Endometriosis," and Dr. Arthur J. Wallace, Tampa, and Dr. Davis H. Vaughan, Clearwater, who will discuss the "Surgical Aspects of the Treatment of Endometriosis." Presentation on Friday afternoon, May 17.


Dr. Estep


Dr. Eagle


Dr. Hardy


Dr. Farrell

Guest Speakers

Dr. Herschel L. Estep, Richmond, Va., Associate Professor of Medicine, Medical College of Virginia, "Evaluation of Alterations in Pituitary-Adrenal Function." Guest of Florida Academy of General Practice. Presentation at 2:30 p.m., Friday, May 17.

Dr. J. Frederick Eagle, New York, Associate Clinical Professor of Pediatrics, Columbia University of Physicians and Surgeons, "Parenteral Fluid Therapy for the Burned Patient." Guest of Florida Pediatric Society. Presentation at 3:00 p.m., Friday, May 17.

Dr. James D. Hardy, Jackson, Miss., Professor and Chairman, Department of Surgery, University of Mississippi Medical Center, "The Transplantation of Organs: Practical Achievements, Current Status and Future Promise." Guest of Florida Chapter, American College of Surgeons and Florida Association of General Surgeons. Presentation at 3:30 p.m., Friday, May 17.

Dr. John J. Farrell, Miami, moderator of the one hour panel on the subject "Postoperative Metabolic Problems." Participants include Drs. Estep, Eagle and Hardy. Presentation at 4:00 p.m., Friday, May 17.

Daily Schedule, Association Activities

Wednesday, May 15

9:00 a.m.	Set Up Exhibits	Hotel Convention Hall
2:00 p.m.	Registration Desk Opens	Foyer, Hotel Convention Hall
2:00 p.m. to 4:30 p.m.	Registration of Delegates	Corridor, Hotel Convention Hall

Thursday, May 16

8:00 a.m. to 9:30 a.m.	Registration of Delegates	Corridor, Hotel Convention Hall
9:30 a.m.	First Session, House of Delegates	Hotel Convention Hall
11:00 a.m.	Annual Meeting, Blue Shield	Hotel Convention Hall
2:30 p.m.	First Scientific Assembly	Hotel Convention Hall

Friday, May 17

8:00 a.m.	Board of Past Presidents Breakfast	Sky Room (Lower)
9:00 a.m.	Scientific Film Program	Hotel Convention Hall
	Reference Committee No. 4	Card Room
9:30 a.m.	Reference Committee No. 3	Tack Room
10:00 a.m.	Reference Committee No. 2	Embassy Room (N)
10:30 a.m.	Reference Committee No. 1	Embassy Room (S)
11:00 a.m.	General Session (President's Guest Speaker)	Hotel Convention Hall
2:00 p.m.	Second Scientific Assembly	Hotel Convention Hall
6:30 p.m.	President's Reception	Poolside

Saturday, May 18

All Day	Meetings of Specialty Societies	

Sunday, May 19

8:00 a.m. to 9:30 a.m.	Registration of Delegates	Corridor, Hotel Convention Hall
9:30 a.m.	Second Session, House of Delegates	Hotel Convention Hall
12:00	Adjournment	
1:00 p.m.	Post-Convention Board of Governors Meeting	Card Room
	Florida Medical Foundation	Card Room

Schedule of Activities for the Annual Meeting

Wednesday, May 15

9:00 a.m.	Set Up Exhibits	Hotel Convention Hall*
2:00 p.m.	Registration Desk Opens	Foyer, Hotel Convention Hall
2:00 p.m. to 4:30 p.m.	Registration of Delegates	Corridor, Hotel Convention Hall
4:00 p.m.	Blue Shield Board of Directors Meeting	Card Room

Thursday, May 16

All Day	Registration and Exhibits	Hotel Convention Hall
All Day	Woman's Auxiliary Hospitality Room	Room 200A, Mezzanine
8:00 a.m. to 9:30 a.m.	Registration of Delegates	Corridor, Hotel Convention Hall
9:30 a.m.	First Session, House of Delegates	Hotel Convention Hall
11:00 a.m.	Annual Meeting, Blue Shield	Hotel Convention Hall
1:00 p.m.	Woman's Auxiliary, Registration and Board	Mezzanine Theatre
2:00 p.m.	State Board of Health	Rumpus Room
2:30 p.m.	First Scientific Assembly	Hotel Convention Hall
4:00 p.m.	Woman's Auxiliary Interview Hour	Mrs. Ludwig's Suite

Friday, May 17

All Day	Registration and Exhibits	Hotel Convention Hall
All Day	Woman's Auxiliary Hospitality Room	Room 200A, Mezzanine
8:00 a.m.	Board of Past Presidents Breakfast	Sky Room (Lower)
	Woman's Auxiliary Registration	Mezzanine Theatre
9:00 a.m.	Scientific Film Program	Hotel Convention Hall
	Woman's Auxiliary House of Delegates	Mezzanine Theatre
	Reference Committee No. 4	Card Room
9:30 a.m.	Reference Committee No. 3	Tack Room
10:00 a.m.	Reference Committee No. 2	Embassy Room (N)
10:30 a.m.	Reference Committee No. 1	Embassy Room (S)
11:00 a.m.	General Session (President's Guest Speaker)	Hotel Convention Hall
12:30 p.m.	Woman's Auxiliary Annual Luncheon	Les Ambassadeurs
2:00 p.m.	Second Scientific Assembly	Hotel Convention Hall
3:00 p.m.	Woman's Auxiliary Membership Meeting	Mrs. Ludwig's Suite
6:30 p.m.	President's Reception	Poolside
7:30 p.m.	Alumni and Fraternity Groups	

Saturday, May 18

All Day	Registration and Exhibits	Hotel Convention Hall
8:00 a.m.	Florida Society of Internal Medicine, Council Meeting	Rumpus Room East
	Florida Society of Ophthalmology and Otolaryngology, Council Meeting	Embassy Room
8:30 a.m.	Florida Orthopedic Society, Scientific	Cafe Cristal
9:00 a.m.	Florida Allergy Society, Business	Sky Room (Upper)
	Florida Academy of General Practice, Board Meeting	Seminar Room #2
	Florida Health Officers Society, Scientific	Card Room (Diplomat West)
	Florida Obstetric and Gynecologic Society, Business	Seminar Room #3
	Florida Society of Ophthalmology and Otolaryngology, Scientific	Embassy Room
	Florida Society of Pathologists, Business	Seminar Room #1
	Florida Pediatric Society, Scientific	Mezzanine Theatre
	Florida Society of Physical Medicine and Rehabilitation	Mezzanine Room 200C
	Florida Psychiatric Society, Business	Tack Room
	Florida Radiological Society	Mezzanine Room 200B
	American College of Surgeons, Business	Hotel Convention Hall
	Woman's Auxiliary Post-Convention Board Meeting	Nassau Room (Country Club)
	Woman's Auxiliary Hospitality Room	Mezzanine Room 200A

*All meetings are in the Diplomat Hotel, unless otherwise designated.

10:00 a.m.	Florida Society of Internal Medicine, Business	Rumpus Room East
	Florida Obstetric and Gynecologic Society, Scientific	Seminar Room #3
	American College of Surgeons, Scientific	Hotel Convention Hall
11:00 a.m.	Florida Society of Internal Medicine, Speaker	Rumpus Room East
11:30 a.m.	Florida Health Officers Society, Business	Card Room (Diplomat West)
12:00	Florida Society of Internal Medicine, Luncheon	Rumpus Room East
	Florida Obstetric and Gynecologic Society, Luncheon, Executive Committee	Dining Room (Section)
12:30 p.m.	American College of Chest Physicians, Lunch and Business	Sky Room (Lower)
	International College of Surgeons, Luncheon	Card Room
	Florida Orthopedic Society, Luncheon	Cabana Area
1:00 p.m.	Florida Pediatric Society, Scientific	Mezzanine Theatre
	Florida Society of Plastic and Reconstructive Surgery, Business	Seminar Room #3
	Florida Psychiatric Society, Scientific	Tack Room
	International College of Surgeons, Business	Card Room
	Florida Association of General Surgeons, Business and Scientific	Hotel Convention Hall
1:30 p.m.	International College of Surgeons, Scientific	Card Room
2:00 p.m.	Florida Allergy Society, Scientific	Sky Room (Upper)
	Florida Society of Anesthesiologists, Board Meeting	Card Room (Diplomat Inn)
	American College of Chest Physicians, Scientific	Sky Room (Lower)
	Florida Academy of General Practice, Scientific	Seminar Room #2
	Florida Society of Ophthalmology and Otolaryngology, Business	Embassy Room
2:00 p.m.	Florida Society of Pathologists, Scientific	Seminar Room #1
	Florida Pediatric Society, Business	Mezzanine Theatre
	Florida Urological Society, Business	Cafe Cristal
3:00 p.m.	Florida Society of Anesthesiologists, Business	Card Room (Diplomat Inn)
	Florida Academy of General Practice, Business	Seminar Room #2
	Florida Society of Plastic and Reconstructive Surgery, Scientific	Seminar Room #3
	Florida Urological Society, Scientific	Cafe Cristal
6:30 p.m.	Florida Society of Ophthalmology and Otolaryngology, Cocktails	Embassy Room
	Florida Orthopedic Society, Cocktails	Pool Deck
	Florida Psychiatric Society, Cocktails	Tack Room
	American College of Surgeons, Cocktails	Mezzanine Theatre
	Florida Association of General Surgeons, Cocktails	Mezzanine Theatre
	Florida Urological Society, Cocktails	Cafe Cristal

Sunday, May 19

Morning 8:00 a.m. to 9:30 a.m.	Registration and Exhibits	Hotel Convention Hall
	Registration of Delegates	Corridor, Hotel Convention Hall
9:30 a.m.	Second Session, House of Delegates	Hotel Convention Hall
12:00	Dismantling of Exhibits	Hotel Convention Hall
1:00 p.m.	Post-Convention Board of Governors' Meeting	Card Room
	Florida Medical Foundation	Card Room

Be sure to attend the "Million Dollar" Annual Meeting.

Selected Lesions of the Legs

A number of dermatoses appearing predominantly on the legs are diagnostic heralds of actual or potential danger. Clinically, it is possible to tell which of these conditions require searching investigation for internal disease and which are essentially local disturbances. Because the microscopic characteristics are quite distinctive, biopsy is helpful for confirmation of the clinical diagnosis.

Erythema nodosum (fig. 1) presents multiple painful, symmetric, red or bluish subcutaneous nodules chiefly on the anterior aspect of the legs. Important is the fact that they do not suppurate or ulcerate. Fever and joint pains are frequently evident. Erythema nodosum may appear with a variety of infectious diseases such as streptococcal infections, tuberculosis and coccidioidomycosis, it may represent a reaction to drugs, or it may accompany sarcoidosis.

Erythema induratum (fig. 2) produces persistent nodules and ulcers over the calves of the legs. Of tuberculous origin, they are bluish red in color and are generally painless. (A much commoner, painful nodose disease of the legs, nodular vasculitis, is often mistaken for erythema induratum. These lesions seldom ulcerate and are usually associated with varices and evidence of pre-existing phlebitis).

Necrobiosis lipoidica (fig. 3) is characterized by discrete, firm, flattened, glistening yellow plaques with purplish border. Central ulceration sometimes supervenes. In an appreciable number of cases, the patient is diabetic, or there is a family history of diabetes.

Kaposi's sarcoma (fig. 4) evolves as bluish or purplish tender infiltrations and nodules which progress to form extensive lobulated tumors. Chronic edema, angioma-like lesions, and brown hyperpigmentation are conspicuously present. The gastrointestinal tract and other viscera, as well as lymph nodes and bone marrow, may be involved by tumor, leading to death. The histopathologic changes are those of angiosarcoma or fibrosarcoma.



(3)



(1)



(2)



(4)

Prepared by the Committee on
Scientific Exhibits
Florida Society of Dermatology

President's Page

Doctors in Politics

Now that the administration has presented its health program to Congress, the medical profession has been thrust again into the arena of politics. It is interesting to consider what experts in the field think of doctors in politics. The master of them all, Jim Farley, has said, "The doctor soon finds he cannot apply the rules of Medicine to his new field. Politics do not conform to the scientific approach he learned in medical school. . . . In politics, all is based on artful compromise. The doctrine that 'Half a loaf is better than none' is fundamental in politics — even though it may be disastrous in medical practice. . . . He (the doctor) must stop kidding himself that he has plumbed public opinion simply because he has surveyed the consensus among doctors in medical society meetings. . . ." In a recent conversation which I had with one of our fine, conservative Congressmen, his remarks went something like this: "Except for businessmen, which is what I consider myself to be, the most stupid people politically are doctors. In any controversial issue you immediately write off your opponents, then you go to work on your friends. If they do not agree with you 100 per cent, you abuse them, you vilify them, and you accuse them of ulterior motives. Some times you make it awfully hard for me to go along with you even when I agree with you."

This is a rather castigating observation, but no doubt there is a strong element of truth in it. Last year one of our good friends in Congress was berated, he was accused of selling out his principles for the promise of a federal judgeship, he was called at odd hours of the day and night — all by doctors and their wives — because he would not openly state that a certain bill in Congress in which doctors were vitally interested would not be reported out of committee. That it never *was* reported out of committee seems to escape the attention of many doctors.

I do not believe we can afford the luxury of venting our spleen on friends who do not agree completely with us. We recognize professionally that there are few absolutes in Medicine, yet we expect to find them in politics. We cannot knock someone down, then expect him to be receptive to our ideas. Before anyone attempts to influence a political decision, he should recognize certain political facts of life:

It is necessary to be informed in depth. A politician faced with a controversial issue is very likely to be receiving letters from as many constituents asking him to vote one way as he is the other. If one knows all about the problem both pro and con, it is much easier to present cogent reasons for espousing a certain solution to it. Politicians often want information, and the reasons why you feel the way you do are important in substantiating your opinion.

It is necessary to have personal knowledge as well as personal convictions. A "write your congressman" campaign letter which does not include evidence of one's own knowledge and belief is not likely to produce results. A letter should be personal and it should reflect personal knowledge and personal convictions.

One who supports your views should know he has your active support. Any politician who takes a stand on a controversial issue knows he is automatically alienating some of his constituents. It is all the more important to him to know that constituents who approve of his stand support him with more than lip service. Let him know that in taking such a stand you approve of his action, that he will have your active support politically and financially at election time, and that he can count on your support when *he* needs *you*.

Never put a politician in an "all-or-nothing" position. As Jim Farley says, "In politics, all is based on artful compromise." Well, it isn't in Medicine, but when we are in the fields of politics, we don't make the rules. Once a Senator said to me, "I have been with doctors on most issues, not because they are doctors but because they have generally been right." Being right is not sufficient in itself. If one is so obnoxiously right that he loses his friends, he is likely to lose his cause. The medical profession cannot afford to be that right. Our cause is not lost. Let us not lose it with misguided efforts to win it.

Robert E. Gallery



Editorials

Some Legal Aspects of Blood Transfusion

At one time within the past decades—before the general public had become suit-conscious or suit-happy—it was possible for the general practitioner to stop at the scene of an accident in order to render aid, for the roentgenologist to take a simple x-ray, or for the surgeon to do a routine appendectomy without the shadow of legal complications lurking in the background. Times, along with everything else, have changed. Today, it appears whatever procedure the physician performs, he must reckon consciously or subconsciously with a potential lawsuit. The field is particularly fertile in blood transfusion.

The American Red Cross reports that for every minute of every day, week in and week out, eight pints of human blood are consumed in the hospitals of America. The grand total for the year comes to 4,204,800 pints or over a half million gallons. It has been estimated that approximately 3,000 lives[1] are lost yearly due to blood transfusions. How many persons have severe reactions, how many patients become critically ill mostly because of serum hepatitis is not accurately known. A noted hematologist states that hepatitis results in one out of 500 blood transfusions.[2] At the 1960 8th International Congress of Blood Transfusions, an infectivity rate of 0.26 per cent was presented by Dr. Paul I. Hoxworth of Cincinnati. At the same Congress, Dr. J. Garrott Allen of the University of Chicago School of Medicine gave a rate of 0.78 per cent.

What with a very small percentage of patients seriously ill or dying as a result of blood transfusion, the kinfolk are having a field day in attempting to collect damages. The doctor, then, should be more cognizant of the medicolegal technicalities involved.

It appears that the keystone of practically all transfusion suits is that legal catchall: negligence. Someone made an error; someone was wrong; someone goofed—and this goof resulted in either injury or death. The big trick, of course, is to place the blame, to find out who goofed, to uncover a "fall guy," preferably a physician or a hospital, someone, anyone, who can pay, and pay handsomely for the mistake. Generally, in keeping with a quaint little tradition known as the "captain-of-the-ship" doctrine, the physician gets tagged.

It has been said that the actual techniques of blood typing and crossmatching are almost perfect. The resulting reactions and deaths occur because of human error. Either the laboratory technician, the nurse, the intern, the physician, the anesthetist, or the surgeon makes a mistake. And this mistake can be a costly one: witness the much publicized $135,000 verdict in a New York trial[3] or the $90,000 award again in New York[4].

Clearly, there are three areas in which mistakes can occur: in the blood bank itself, between the blood bank and the patient, and in the presence of the patient.

In the blood bank, errors may show up in typing, crossmatching, or other laboratory procedure. A blood container may be incorrectly labeled as was the case in Mississippi Baptist Hospital vs Holmes[5] when a patient died because of infusion with the wrong type of blood. In this instance, the hospital was held liable because of an old law which states that the master is liable for the negligence of his servant. Where a physician-pathologist is in charge of a blood bank, he can be sued and held liable for any acts of negligence by employees under his direct control if a "master-servant" relationship exists and this is certainly the situation in most laboratories. The responsibility of the laboratory extends also to providing clerical evidence of adequate history of the donor and aseptic phlebotomy as well as good storing procedures.

A particularly controversial problem exists in the transfusion of blood which is followed by a

serum hepatitis in anything from 14 to 150 days later. At this time, not only is there no way of treating blood to kill the virus of hepatitis, but there is no laboratory test to detect it. The virus cannot be seen even with the most powerful microscope. To make the problem more complex, one cannot prove or disprove that a case of serum hepatitis was caused by a particular blood transfusion since there are other ways in which the disease can be acquired.

The blood bank should take a good history; yet, unfortunately, that in itself is no guarantee. The donor might be a carrier who presents himself in all good faith as virus-free. It is recognized that the SH virus can remain in the blood for years without clinical evidence of hepatitis. On the other hand, a donor with ulterior motives might deliberately pass himself off as virus-free when, in fact, he may have had hepatitis a year or two previously.

Certain authorities are of the opinion that blood labels should carry some sort of a warning statement regarding the inherent risk of transmitting hepatitis. Yet, a Delaware court in Fischer v Wilmington General Hospital[6] stated: "Considering the frequency of the use of transfusions, the nature and extent of the risk involved in comparison with the alternative risk, the possible detrimental effect of advising patients of the risk and the general practice in the local medical profession not to so advise patients, the court feels impelled to conclude that this defendant did not have a legal duty to plaintiff to advise her in advance that hepatitis might be communicated thereby."

Occasionally where there is reason to fear that the disease may occur, some physicians inject 10 cc. of human immune serum globulin intramuscularly within one week after transfusion and an additional 10 cc. one month later, hoping that this procedure will forestall the development of serum hepatitis. Since this is not a commonly recognized practice, omission of the injections does not constitute grounds for suit.

Many courts have ruled that the transfusion of blood of an incompatible group is, in itself, prima facie evidence of negligence. An example is in Berg v New York Society for the Relief of the Ruptured and Crippled[7] in which a woman was administered 500 cc. of Type A Rh positive blood. According to the technician, the patient was A Rh positive, but some difficulty developed and the transfusion was stopped. At a later date, she became pregnant and was delivered of a stillborn fetus. Her blood was found to be Type A, but Rh negative. She sued the hospital and was given a judgment.

On the other side of the fence, however, the Utah Supreme Court in 1960 decided that improper matching of blood does not necessarily show negligence. In a case where a female patient died as a result of a lower nephron nephrosis which experts testified could be a reaction from incompatible blood, the court stated that all blood transfusions carry a risk of death and since it was shown that the hospital had taken all standard precautions, a verdict for the hospital was upheld.

To an average intelligent person, the trip to the blood bank and back again to the patient's bedside would seem like a simple one, but, in fact, it has proved perilous. Note the nurse on her way to pick up a pint of blood. She stopped at a nursing station, put down the order for blood, then picked up what she thought was the same order. It was, however, a different requisition for blood of a different type. As a result of this carelessness, wrong type blood was administered and a reaction occurred. Since the nurse was an employee of the hospital, suit was instituted against the hospital.

The third situation is at the bedside. An intern may enter a patient's room, explain to her that this pint of blood is from her daughter, and, despite protests from the patient that she has no daughter, administer the blood. A reaction occurs with a resultant suit for malpractice. Because the intern is a servant of the hospital, the latter gets hit.[8] Or, in the operating room, a nurse hands a pint of blood to the anesthetist, who fails to check the label. A reaction follows and the patient dies. Wrong type blood has been used.[9]

As stated, the keystone of all these cases is negligence. The one who is found guilty of said negligence must pay damages. Oftentimes, negligence by proxy is seen. The hospital can be found guilty for the act of an intern in its employ. On the other hand, if a hospital employee is at the time of the negligent act temporarily working for the physician, then the physician is held liable.[10]

To avoid suits, one must follow three lines:

1. Justify the use of blood transfusion by the fact that no more satisfactory therapy exists in a particular case and that the inherent risks do not exceed those of abstaining from transfusing a patient.
2. Prove beyond a doubt by well kept and documented records that standard medical

practice was adhered to throughout the act of transfusing.

3. Be diligently alert. Check and recheck labels. Stop a transfusion at the very first sign of difficulty. It is wiser to destroy a pint of blood than the future of a patient.

An interesting and important side light in the legal aspects of blood transfusion is the stand of a religious group known as Jehovah's Witnesses. These people interpret the Mosaic law of "ye eat neither fat or blood" (Lev. 3:17) as a direct prohibition against blood transfusions and are adamant in their refusal to accept needed blood. They have the legal right to reject transfusion no matter how badly the transfusion is needed; to give blood against the will of the patient is technical assault and battery. The patient has a perfect case no matter how dire the need, and the physician would do well to respect the wishes of the patient unless he wants to court a malpractice suit with the outcome already known.

A different concept exists in the case of a minor needing a transfusion. A New Jersey Supreme Court has recently ruled — and this attitude seems to be similar in other courts — that when the life of a child hangs in the balance, the doctor and not the parent must make the final decision, religious scruples notwithstanding. Justice C. Thomas Schettino wrote: "The right to practice religion freely does not include liberty to expose the child to ill health or death." In an emergency or where a parent will not consent to a transfusion, the court usually appoints a temporary guardian — either a physician or a hospital superintendent — who then authorizes the transfusion. The reasoning, of course, is that if an adult wishes to place his life in jeopardy that is his business and his legal right, but he does not have the legal right to place in jeopardy the life of a minor who cannot reason for himself the right or wrong of the procedure.

References are available from the author upon request.

Arthur F. Schiff, M.D.
Miami

D for Defeatism

Little Johnny was not prepared for the history examination and wrote on his paper, "God only knows; I don't." On the next day, his teacher returned the corrected papers and underneath Johnny's words was succinctly written, "To God, 100; to you, a D." The letter D, in my childhood, had connotations of things unpleasant, not only poor grades in school, but also such words as dope, devil, "darn," or even death. An interesting corollary was noted in a 1961 issue of the Wall Street Journal wherein a writer also blasted away at the letter D. He pointed out that D should stand for Defense, but for many, it stands for Defeat. For those with radiation phobia, nuclear phobia, or who fear the end of the world, it should be recalled that the D of Death, the Black Death, namely, the Plague, in the fourteenth century was no small threat. About 25 million Europeans died, less than one fourth of all the people. Since the time of Adam, Man has gone through innumerable tragedies, floods, wars, pestilences and his D of disease, but he has, nevertheless, clung to Planet Earth.

Today, it is true, Man is begging like a puppy on his master's leash to break away into space, but this D is for Discovery, not Destruction. His survival instinct has always won out—always to dust himself off, to whoop it up on weekends, and to procreate anew. No one can prophesy if, or when, a nuclear war will be touched off, or what its effects will be. It might throw us back for centuries into another D, the Dark Ages, but on looking back at Man's lifeline of a mere two million years, this, too, is a tiny d, as that drop in the bucket in terms of time, particularly in relation to the existing, or dying, stellar bodies that surround us.

Today many are sure miscalculating Man must be exterminated since no other generation has had to face the D of destructiveness from nuclear energy. This is mere conjecture. There are whispers that if one should survive a thermonuclear war, life would not be worth living, or that greed, law of the gun, and "dog eat dog" will reign. Such arguments proved to be unfounded in World War II, following the blockbuster bomb-

ings with their awesome fires in Britain and Germany. Sixty thousand were burned to death after the Hamburg raid of July 27, 1943. The reaction was just the opposite; wounded aided wounded in a common effort to restore themselves and the community.

Many scientists are agreed that radiation, no matter how minute, causes damage to our cells. No one ventures how tiny the level of radiation must be to produce the earliest changes we recognize as cancer, leukemia or damaged inheritance. There are, however, those neighbors about us who insist that there will be radical mutations from the atomic bombs ranging from bodily disfigurement to insanity and that generation after generation will be cursed. This prediction, too, is a guess. Mutations and cellular changes are going on about us—according to Nature's plan—silently and constantly. Whether there is peace or war, changes, good and bad, are likely. They may take 50 years or 5,000 years, or even more. It is much easier to blame an ugly change in Man's tissues as a result of his scientific tinkering and poking into the natural forces than to blame Man's personal failures and temptations in life. At a 1961 meeting in Paris, Dr. George Heuyer reported that 80 per cent of 400 children under hospital treatment for the mentally disturbed had at least one parent who was an alcoholic.

It is scientifically correct, however, that at this very instant our bodies are being bombarded by so-called "natural" radiation. Energized particles are piercing our frames, our brains, our sex glands, our very foods, by such metallic demons as radioactive iron and carbon and unstable subatomic particles known as mesons, which are streaming down from stellar space in the form of cosmic rays; also, radioactive potassium, radium, and radon gas from soil and rocks—the so-called natural background radiation. In 30 years, considered man's procreative years, about 4½ units (roentgens) are absorbed by all of us, a figure much higher than that inflicted on mankind by the present homemade fallout. Even with the 1961-62 atomic bombs Russia has dropped, Dr. W. F. Libby, a renowned physicist, estimated that total radiation will have been increased only a few per cent. Since 1958, and omitting America's and Russia's recent trials, nations had dropped in bomb energy well over 174 megatons, that is, over 174 million tons explosive energy equivalent to that of trinitrotoluene, or TNT. If we had a nuclear war, the long-lasting radioactive fallout is estimated to increase 20 to 30 times the current level, and it could mean a doubling or trebling of the current radiation from natural sources. Perhaps the best deterrent to the threat of radiation fallout, that universal dessert that follows low air bursts or surface contact thermonuclear bombings, is the fact that both the receiver and the giver may suffer its consequences.

Any improvised shelter, capable of reducing even 1/20 or 1/30 the radiation energy outside, will significantly reduce human casualties beyond the area of blast damage. A foot of earth, for example, the lowly sandbag, reduces radiation to about 1/30 and 3 feet of earth provides attenuation to about 1/1000 of the radiation (R-322-RC, U. S. Army report, July 1, 1958). If there was a salvo of simultaneous attacks on most of our outstanding cities by megaton atomic bombings, the immediate real estate damage 10 to 30 miles from the epicenter seems far less significant than the actual area in terms of square miles. (Area= 3.14 (or pi) x 10-to-30 miles squared.) For every 10 per cent of real estate damage one expects 20 per cent in casualties. Casualties representing 50 per cent dead and 50 per cent wounded in this circumference could be expected. It is, however, the living outside this holocaust with whom we are concerned. A system of fallout shelters could save tens of millions of lives. If the shelter system was also blast-proof to withstand 50 to 100 p.s.i. (pounds per square inch above the normal atmospheric pressure), fatalities would be below the estimated one third of the population instead of the calculated 50 per cent (R-322-RC, 1958). Most United States homes and smaller buildings would collapse at only 2 p.s.i. The casualties would be still fewer if warning time was adequate, or if there was time to evacuate women and children. London's population was reduced 25 to 35 per cent by the time war was declared, through the use of such strategic evacuation.

As was pointed out in the New York Times, Nov. 6, 1961, a country whose population can count on an operational shelter system is a stronger country. Shelters are part of the nation's defense arsenal, and the stronger a country is, the less her chance of being attacked. Sweden's realistic shelter system might be envied according to Dr. S. Garb of the United States Public Health Service. Some of the underground shelters in Sweden are large enough to house 20,000 people at one time. While America has about one million Civil Defense workers, Dr. L. Goure, researcher

at the Rand Corporation, reported that Russia has a trained Civil Defense corps of over 22 million. In the past decade, Russia spent $2.50 to $6.00 per person in Civil Defense programs, while the United States allotted 23 cents per person in 1960, $1.00 in 1961 and 30 cents today.

What about medical care in a mass casualty situation? As aptly stated by Nurse C. M. Sullivan of the Office of Civil Defense Mobilization, it will be "the best to the most with the least and by the fewest." Certainly the doctor, nurse, dentist, and pharmacist will not be spared by the blast because of title. They will either be under the rubble or feverishly working on top of it. In Hiroshima, after that 20,000 ton atomic bomb on Aug. 6, 1945, an infant force compared to today's million ton TNT equivalent in explosive power, 260 of the 300 physicians were among the 80,000 dead and 85,000 wounded in this unsuspecting city of 300,000. Of the 1,800 available nurses and orderlies, 1,300, or 72 per cent, were rendered unfit for service. With three fifths of the wounded having thermal injuries or burns plus trauma, Hiroshima's loss of 80 per cent of the fire equipment only worsened matters. This, of course, overlooked the nearly impassable, ruptured streets because of fallen buildings, and distorted water, gas and electric utilities.

Who then will actually do the lifesaving? Our neighbors, our buddies, and the lay folks. Woe, indeed, if the survivor does not know or cannot stomach the basic principles of first aid. Because survivors in a nuclear attack may have to exist isolated from assistance for about 14 days, the Medical Self-Help Training Program was instituted this year by the United States Public Health Service and the American Medical Association. This 12 lesson course is available to every American from junior high school upwards.

Col. D. S. Wenger, USAF, reminds us that the earliest treatment becomes survival care. "With it man survives, and without it, he dies." He begs that First Aid Training become enforced as a requirement in everyone's life instead of the lackadaisical, conversational "something nice-to-know" approach practiced over the bridge table. He emphasizes the understanding and practice of five basic principles in lieu of dozens and dozens of academic lectures on various facets of First Aid. Col. Wenger stresses: stop the bleeding; maintain effective respiration; splint the fracture "where they lie;" handle injured people properly and carefully; and use simple wound dressings after thorough wound cleansing with soapy water.

To these five principles, one should add two more: plan and practice. A corollary would be practice the plan. The beautifully written Civil Defense plan in the hospital, in the factory, in the school, in the town hall or county seat, may give us solace, but unless it gets off the paper it is written on and becomes alive, it will not be worth the D in the famous dam of Tinker. Whether one is a student, clerk, hairdresser, laborer, or doctor, community-wide drills during a typical workday, and also in the night, must be tried over and over, at first by command and later impromptu, so that each will know where to go and what to do the instant the danger signal is heard. Only by repeated trials will each area leader, guard, driver, or first aid assistant learn to perform his assignment mechanically and calmly. Only by such repetitious drilling will the tremendous toll from fear, inadequacy, hysteria, docility, confusion, and ineptitude—those "sixth" columnists in the trail of disaster—be greatly reduced. These demons have been reported to affect as many as three out of four people in a massive disaster, and our own medical personnel are not immune. Perhaps we need laws to remove the lethargy that permeates so many communities with reference to Civil Defense action, and to guarantee that wage earners will be paid during drills, or that police, or previously appointed guards, may forcefully remove pedestrians and vehicles from streets, or that courses like the Medical Self-Help Training Program become part of junior and senior high school and college curricula, or that paramedical helpers as pharmacists, veterinarians, dentists, practical nurses, laboratory technicians, and interested volunteers will be paid for contributing three hours of their time at least twice a month in our hospitals in order to observe and assist in live first aid. Truly, it is these folks who may yet be "the doctor in the house" when the real crisis comes along.

The worst defeatism of all is the refusal to face the truth. This is pure defeatism, based on futility of resistance, politically, morally and militarily. This defeatism ranks a capital D, that for disgust. It is seen in certain areas of America and among weaklings abroad who demand a surrender to that D of dogma, the communistic dogma, rather than to risk war. As a writer aptly stated, the matter has nothing to do with whether one wishes to survive or not, whatever his personal

reasons. Rather it has to do with our government's need for his survival, not as an individual, but in the interest of an entire nation.

For those who are fatalists and those who would rather reach for a suicide pill than to live and struggle with their boots on—whether it be the duress of radiation or isolation in shelters—Rev. J. D. Parker of Deerfield, Ill., reminds us: "It's not only our own life, but those of our loved ones. We must prepare for them. Morally, no one has the right to give away—or be careless with—someone else's right to survive."

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Workman's Compensation Educational Conference

The Workman's Compensation Educational Conference, held in Palm Beach on October 24, 25 and 26, 1962 attracted between 600 and 700 registrants, including practically the entire working staff of the Florida Industrial Commission, many representatives of the insurance business, representatives of labor and industry, many lawyers and very scattered representatives of the medical profession. It was a definite sign of the high regard in which Florida's Workman's Compensation system is held that surrounding states sent members of their industrial commissions to this annual conference. Certainly it speaks well for the Florida system and its personnel that the Hon. A. Worley Brown, Chairman of the Florida Industrial Commission, has been elected president of the International Association of Industrial Boards and Commissions. He has secured the next annual meeting of that body for Miami Beach in November 1963.

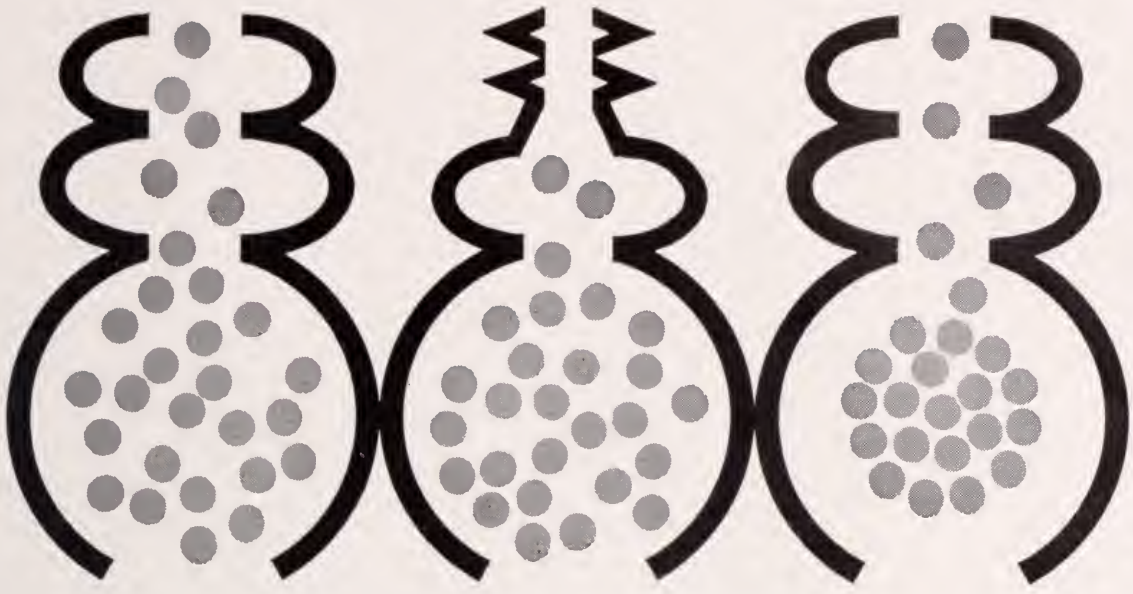
Among the highlights of the conference was the opening speech by Mr. Brown. He discussed the present opportunity for duplication of disability benefits through Workman's Compensation and Social Security disability provisions, pointing out that if Washington takes over the field, the incentive for health safeguards might be lost, that the government would be involved in claimants' payments and that there would be the usual high Washington brokerage fee. In addition, there would be a good chance for loss of individual enterprise at one fell swoop. This last would particularly occur when duplicated disability benefits could exceed previous actual earned income and all would be tax-free.

Many rulings on compensable injuries and diseases were discussed. In Florida, compensation has been legally withheld in diseases due to pre-existing conditions such as allergic sensitivity. Over the United States, however, there has been a definite trend toward making the only prerequisite for a compensable disease or injury that of being present on the job when the disease or injury occurred. In fact, there have been rulings that an out-of-the-ordinary strain or excitement while on the job in the daytime contributed sufficiently to a heart attack occurring while the victim was at home in bed to make him eligible for Workman's Compensation. One speaker whose subject was "Arising out of. . . ." quoted many of these recent bizarre judicial rulings.

There is a Department of Industrial Safety of the Florida Industrial Commission. This department on request will inspect safety engineering in any industry and make recommendations. In previous years no laws existed by which recommended safety measures could be required, but now state laws force compliance with certain safety measures. The Industrial Commission will also teach a 10 hour course on safety to all employees of a company. Most of us are familiar with the various incentives to safety which many of our industries have discovered and are using.

With the somewhat heated negotiations the medical profession has had with the Industrial Commission in the matter of fees, I was interested in hearing how the claimant attorney fees were set in industrial cases. A rule of thumb in use is 20 per cent of the first $500 award, 10 per cent of the second $500, and 5 per cent of all over $1,000. This fee is not rigid as each deputy commissioner can also consider other factors in awarding a lawyer's fee such as the amount of research required, the length of the hearing, the time spent in interviewing and in taking depositions, and also what the insurance carriers are paying opposing lawyers.

(Continued on next page)



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Q-7

Scattered items of information which I picked up were as follows:

The first seven days of disability are not compensable unless the disability lasts more than 21 days.

The employer must start payment of disability benefits within 14 days of the injury or pay a penalty of 10 per cent unless the case comes to a hearing, in which case there is a 20 per cent mandatory penalty when an award is made. Also, a claimant can collect 6 per cent interest on all past due compensation awards.

There are such things as "wash-out settlements," but the deputy commissioners seem rightly to discourage them as much as possible.

The Rehabilitation Division of the Florida Industrial Commission is an increasingly valuable department.

There were about 13,000 industrial accidents in Florida last year with only 350 of them coming to a hearing before the Commission. Physicians were probably involved with all of the 13,000 and lawyers only with the 350, and yet in attendance at this meeting the lawyers must have outnumbered the doctors 100 to 1.

I was impressed with the sincerity and mental caliber of the deputy commissioners and of the claims supervisors. I think the doctors in all districts have found fair treatment to our patients to be the direct goal of these men.

In the conference the medical profession was twice complimented. Mr. Brown paid tribute to the great help he was getting from the advisory functions of Dr. Thomas J. Bixler of Tallahassee, and Mr. Frank Roche, President of the Florida State Federated Labor Council AFL-CIO, paid tribute to the compassion of doctors who universally are willing to give care to the lowliest workman equal to that of the wealthiest person.

Henry L. Harrell, M.D.
Ocala

Meetings

April

Florida Association of Blood Banks, Annual Meeting, April 26-28, Outrigger Inn, St. Petersburg

May

"Million Dollar" Annual Meeting, Florida Medical Association, May 16-19, Diplomat Hotel, Hollywood

June

112th Annual Meeting, American Medical Association, June 16-20, Atlantic City

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News

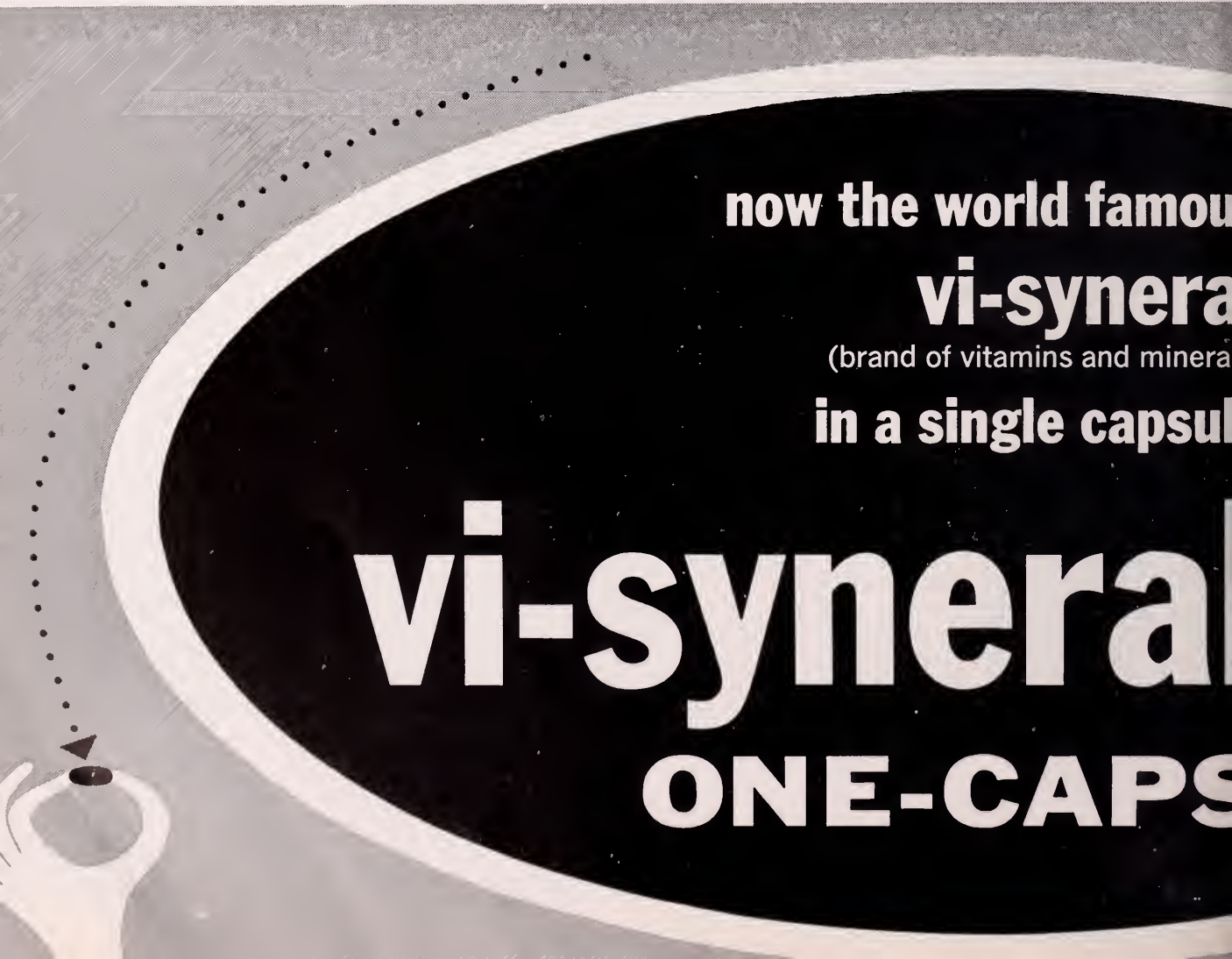
The 112th annual meeting of the American Medical Association will be held June 16-20 in Atlantic City. An attendance of 15,000 physicians is anticipated because of better transportation facilities and more up-to-date room accommodations. The May 4 issue of the Journal of the American Medical Association will have the complete scientific program, hotel accommodations and advance registration forms.

The nation-wide 1963 Respiratory Diseases Campaign, beginning May 1 and ending June 15, aimed at focusing public attention on the possible dangers to health of chronic cough and shortness of breath has been officially endorsed by the Florida Medical Association. The Campaign is sponsored locally by the Florida Tuberculosis and Health Association.

The "Million Dollar" Eighty-Ninth Annual Meeting of the Florida Medical Association is being held May 16-19 in the Diplomat Hotel at Hollywood-by-the-Sea. In this issue of The Journal may be found the schedule of activities together with the names and pictures of the speakers.

An opportunity exists for a young American general practitioner with an interest in surgery to work with the famed Burma surgeon, Dr. Gordon S. Seagrave, at his 250 bed hospital in Namkham, Burma. Minimum appointment is for two years, and the candidate must be prepared to leave for Burma not later than the spring of this year. Anyone interested should write: American Medical Center for Burma, Inc., 6 Penn Center Plaza, Philadelphia 3, Penn., stating qualifications, etc.

The next oral and clinical examinations of the American Board of Obstetrics and Gynecology are being held at the Edgewater Beach Hotel in Chicago April 29 through May. Application forms may be obtained from Dr. Robert L. Faulkner, Executive Secretary, 2105 Adelbert Road, Cleveland 6, Ohio.



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*Schiller, I. W. and Lowell, F. C.: New England J. Med. 261:478, 1959. A. H. ROBINS CO., INC., RICHMOND 20, VIRGINIA

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REFERENCES: 1. Moeller, H.C.: Ann. New York Acad. Sc. 99:158, Feb. 28, 1962. 2. Epstein, J. H.: Am. J. Gastroent. 37:295, 1962. 3. Sun, D. C. H.: Ann. New York Acad. Sc. 99:153, Feb. 28, 1962. 4. Posey, E. L., Jr.: Am. J. Digest. Dis. 7:863, 1962. 5. Young, R., and Sun, D. C. H.: Ann. New York Acad. Sc. 99:174, Feb. 28, 1962.

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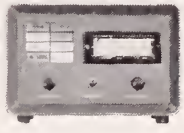
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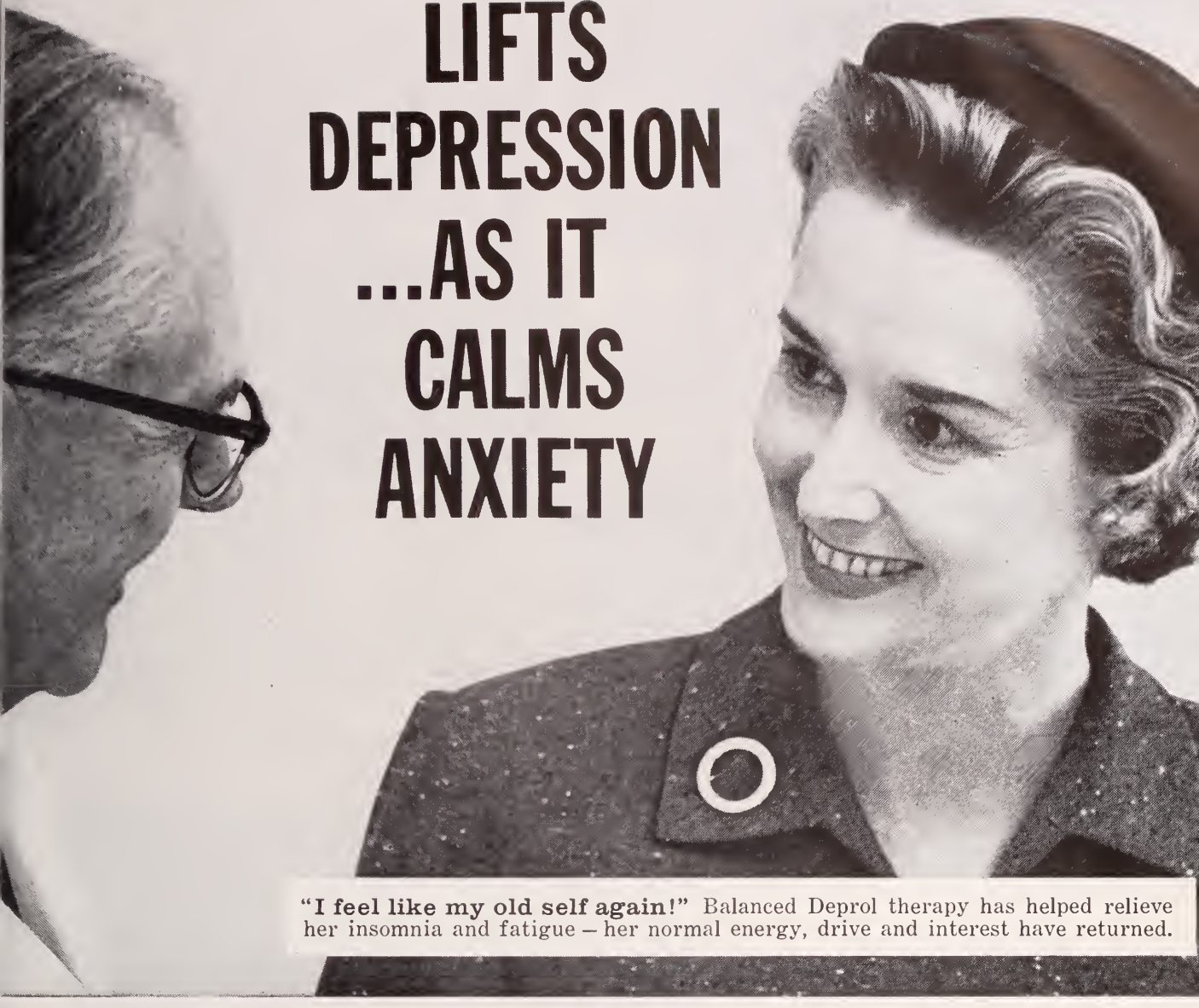
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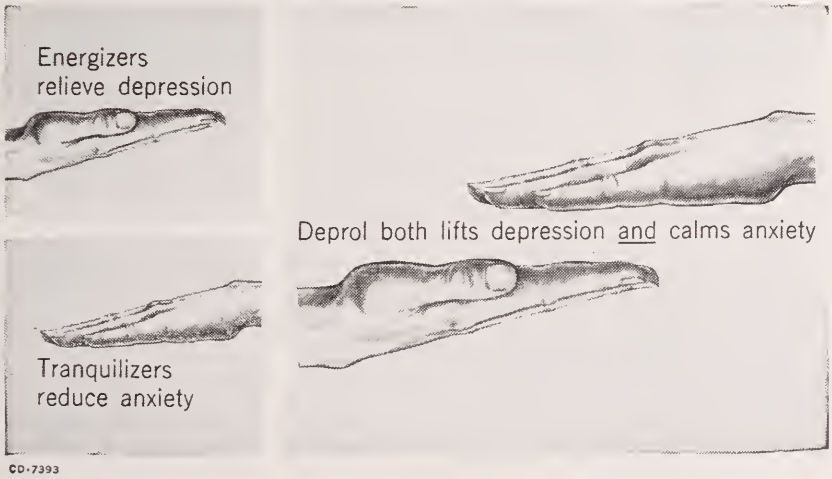
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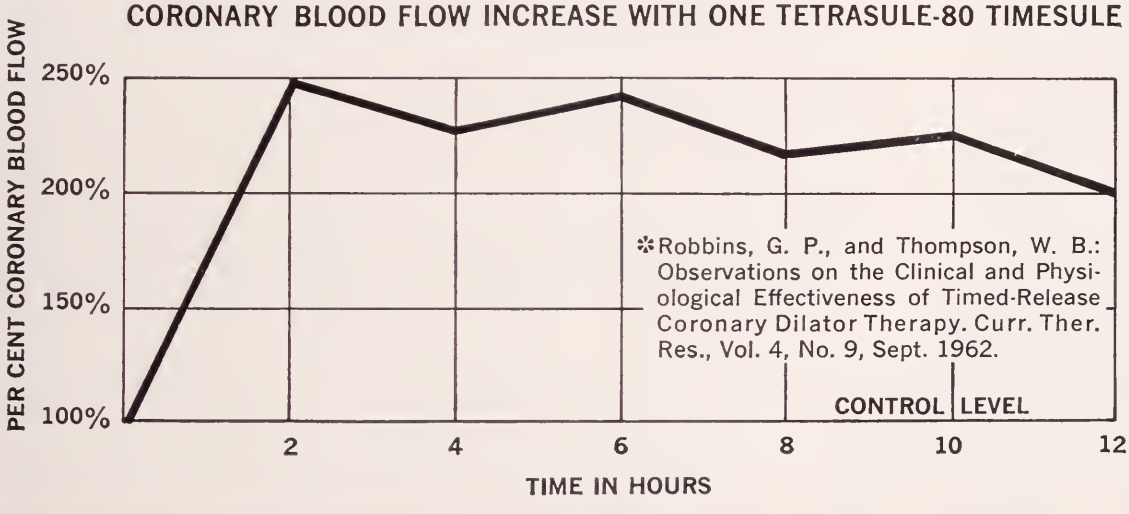
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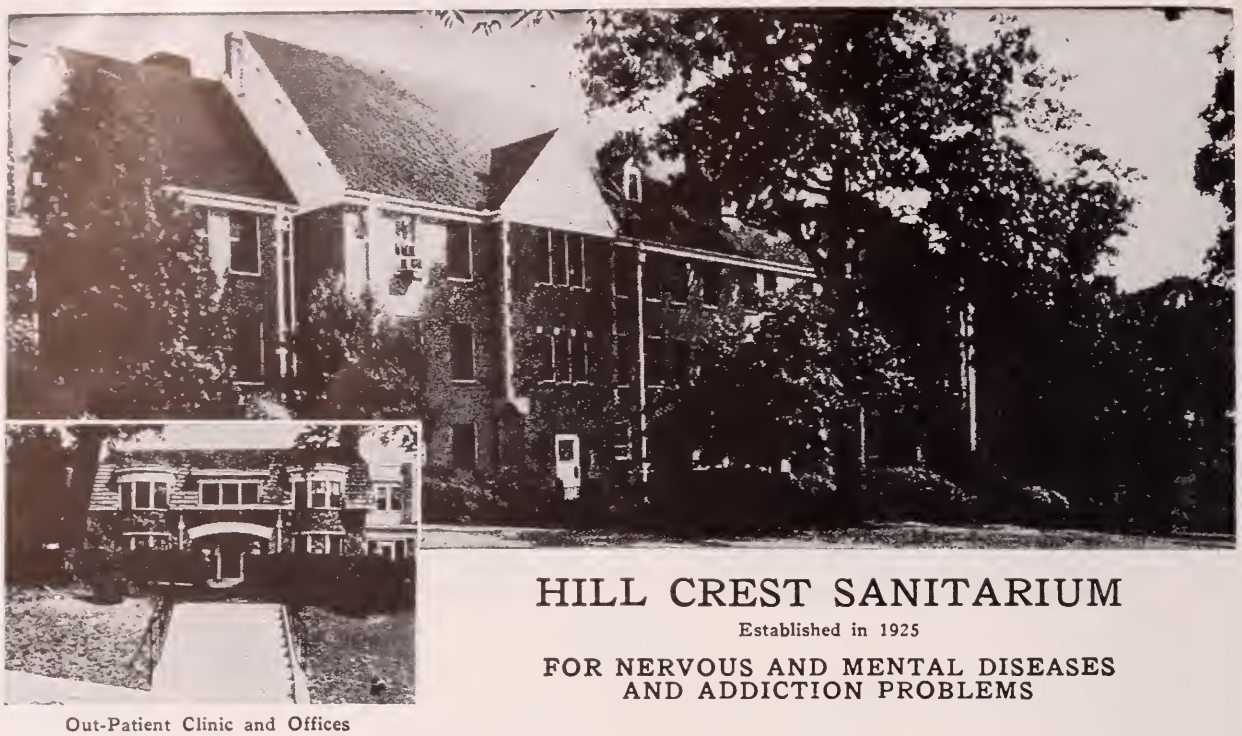
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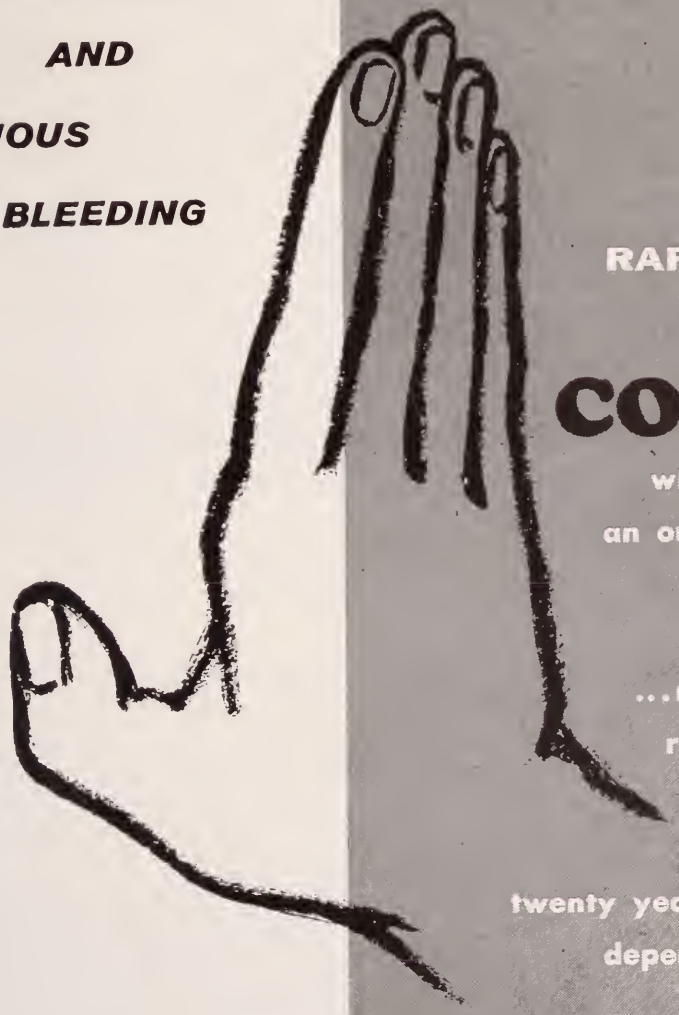
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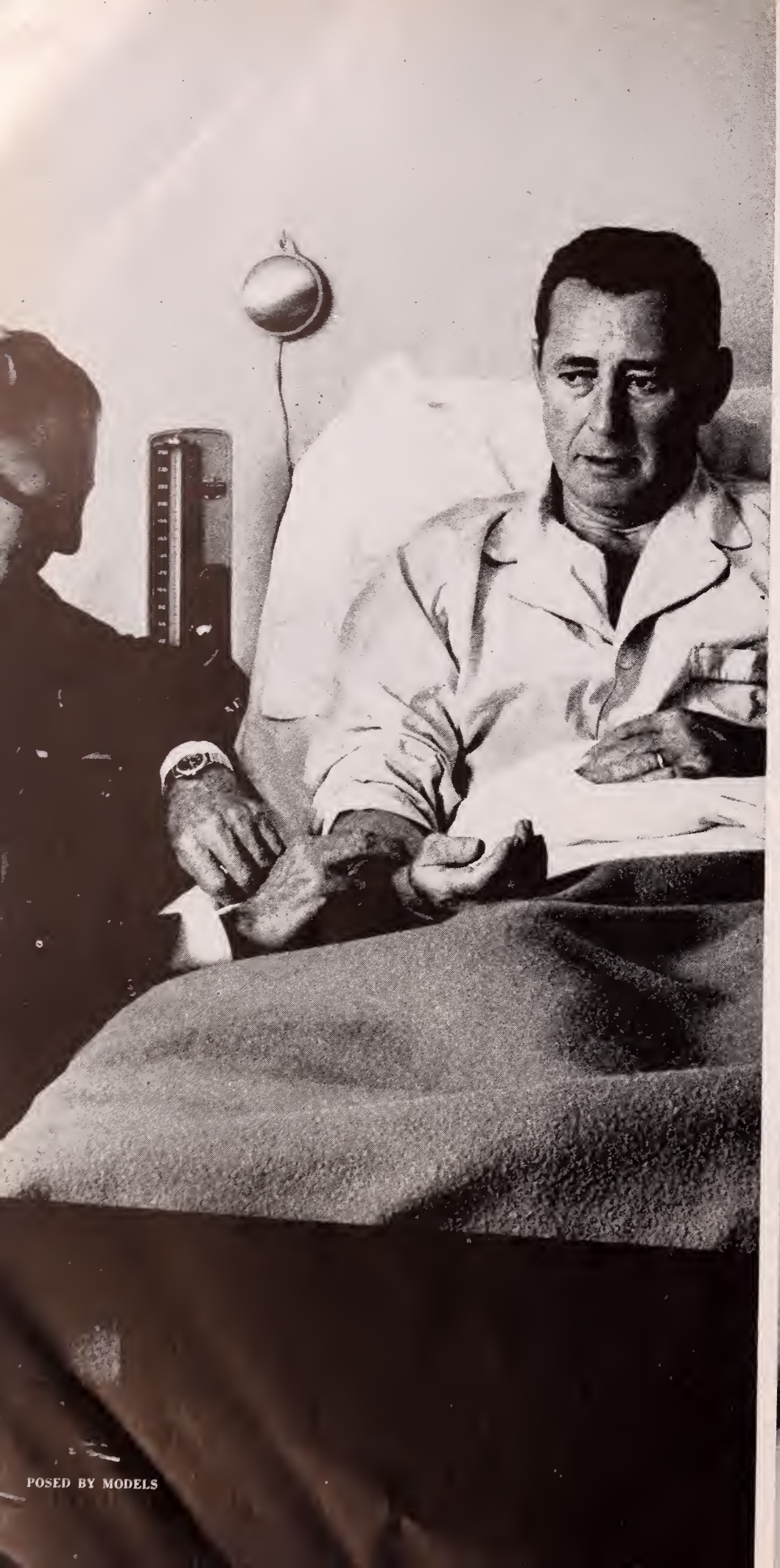
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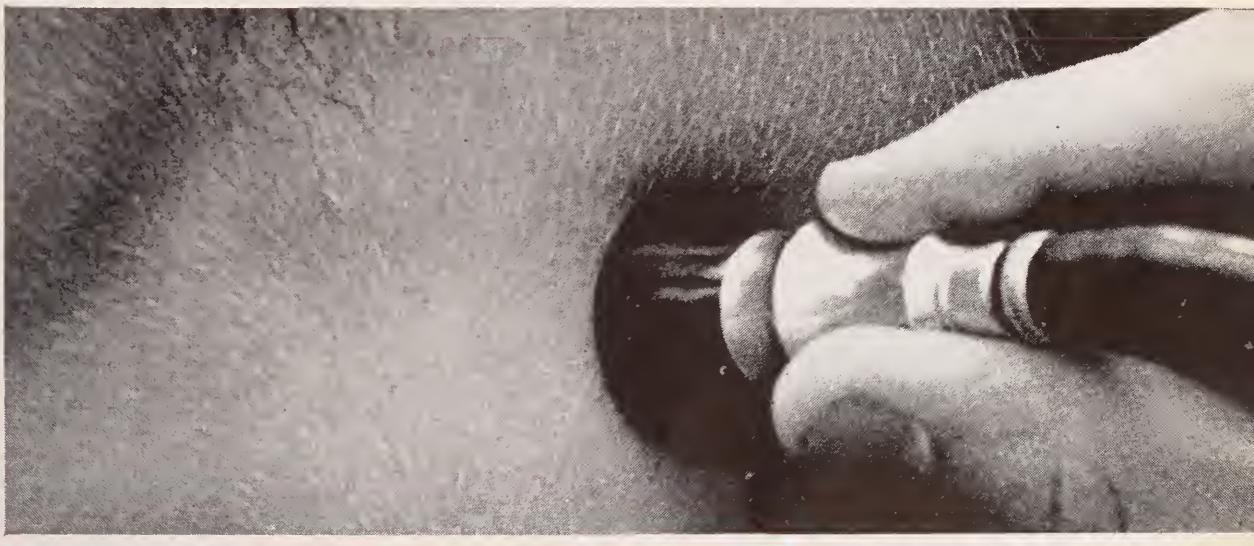
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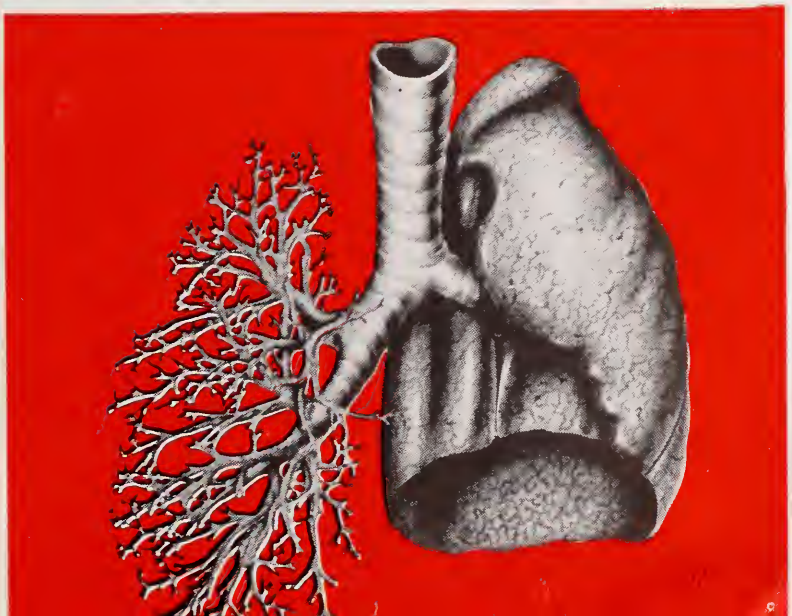
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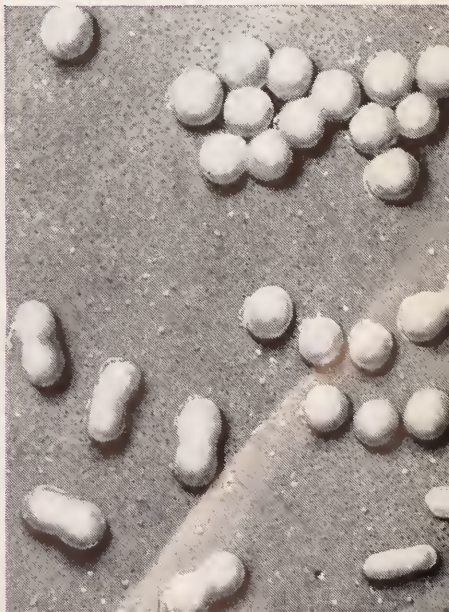
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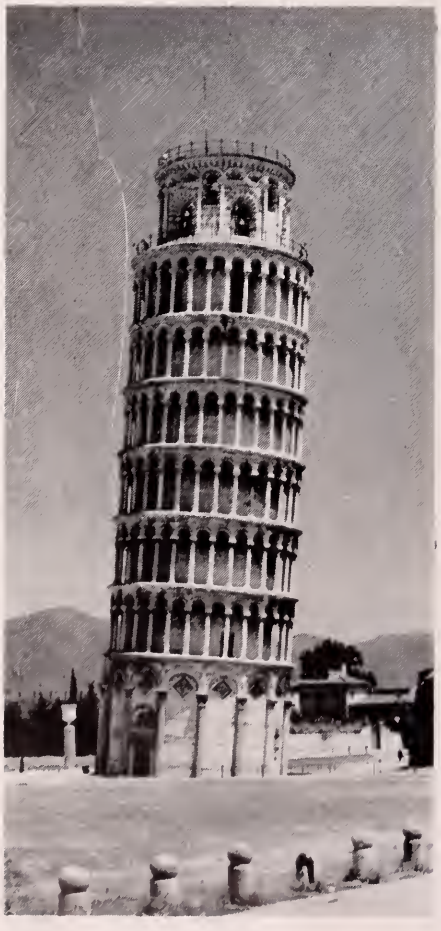
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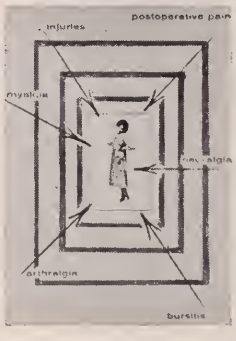
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[1] Simon, F. & Bernstein A.: "The Treatment of Obesity in Patients with Cardiovascular Disease," Angiology, *12*:32-37, Jan. 1961.
[2] Plotz, M.: Modern Management of Obesity, J.A.M.A. *170*:1513-1515 (July 25) 1959.
[3] Bernstein, A. & Simon, F.: "Treatment of Obese Diabetics and Arteriosclerotics," Clin. Med. 907-920, May 1961.

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2. Fluoride Compounds, Accepted Dental Remedies, 27th Ed.:139, 1962.

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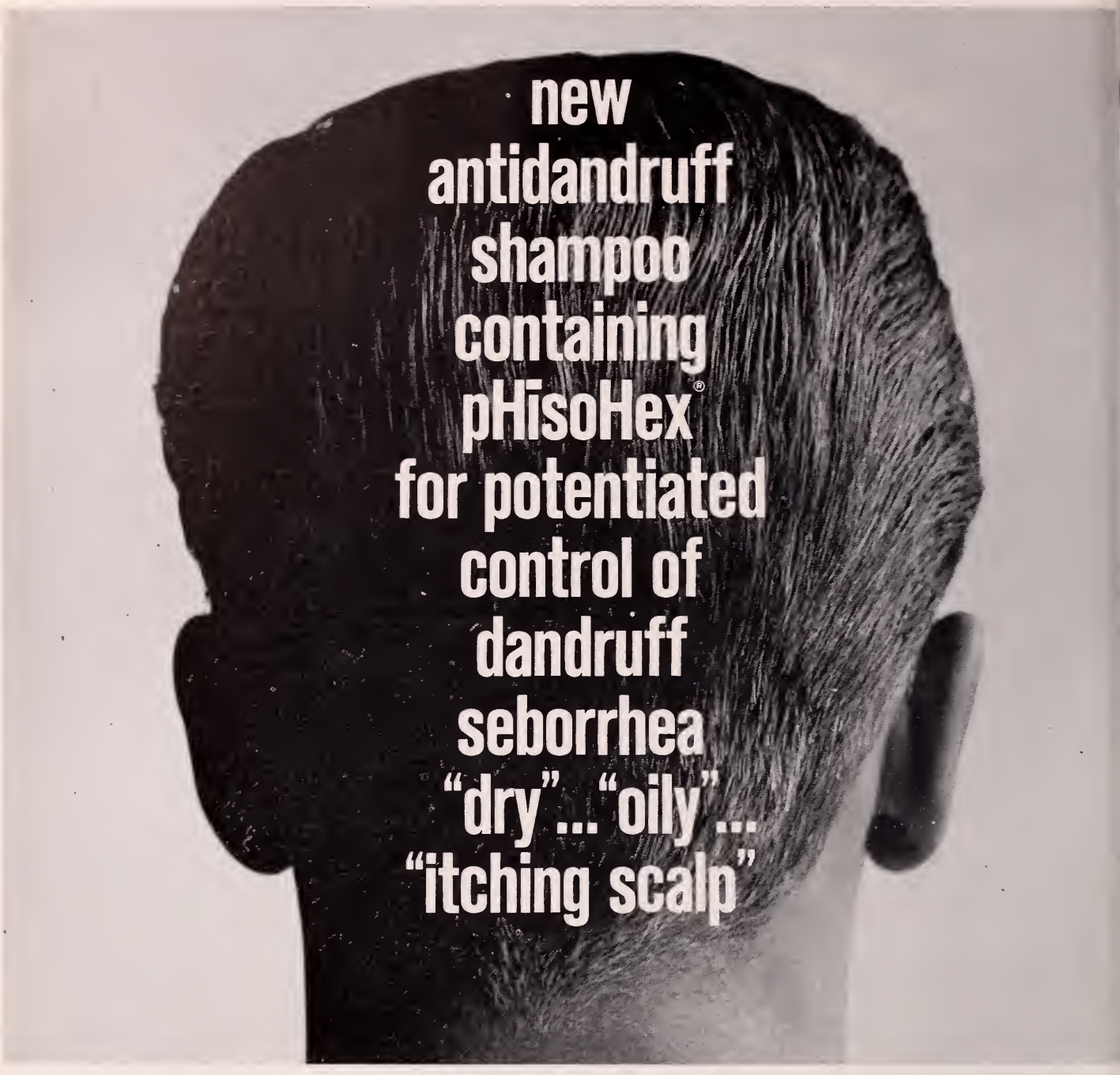
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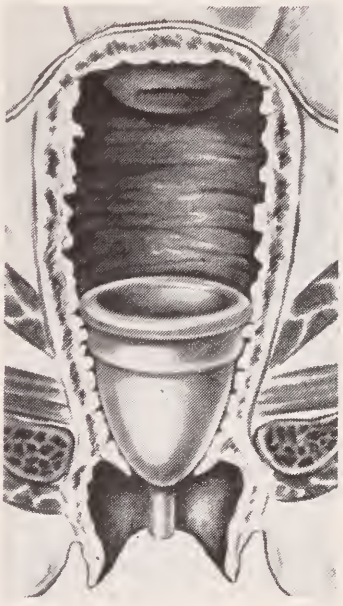
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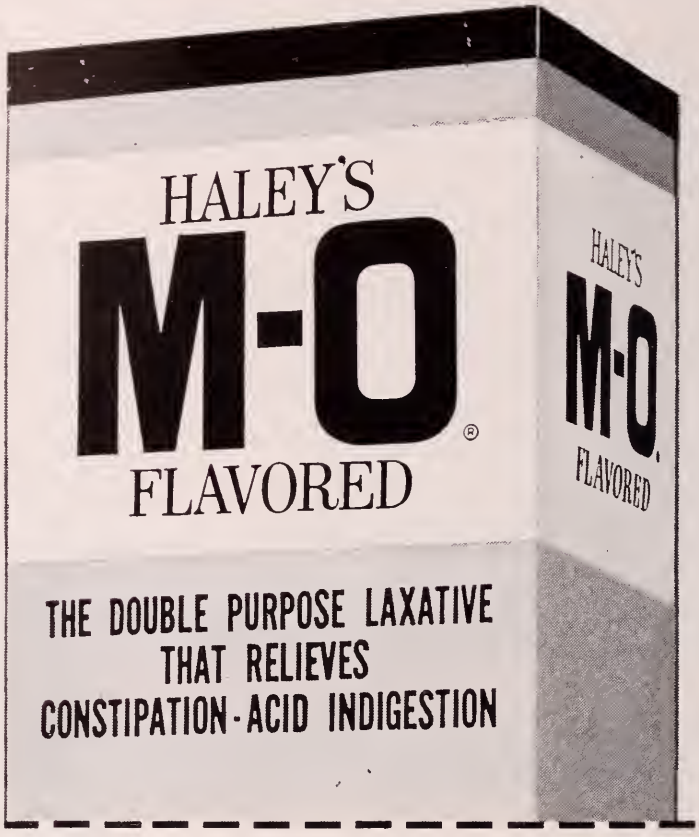
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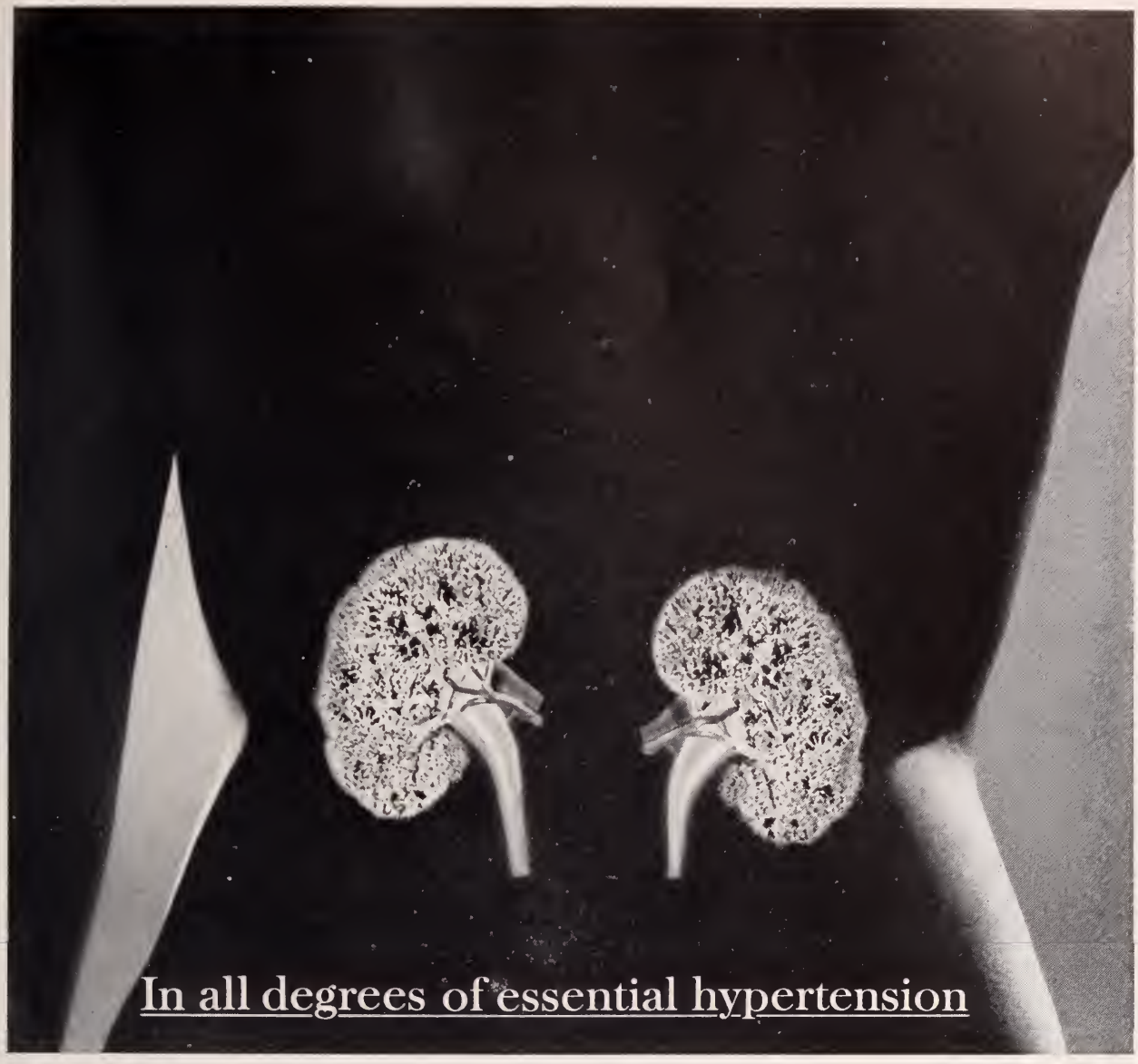
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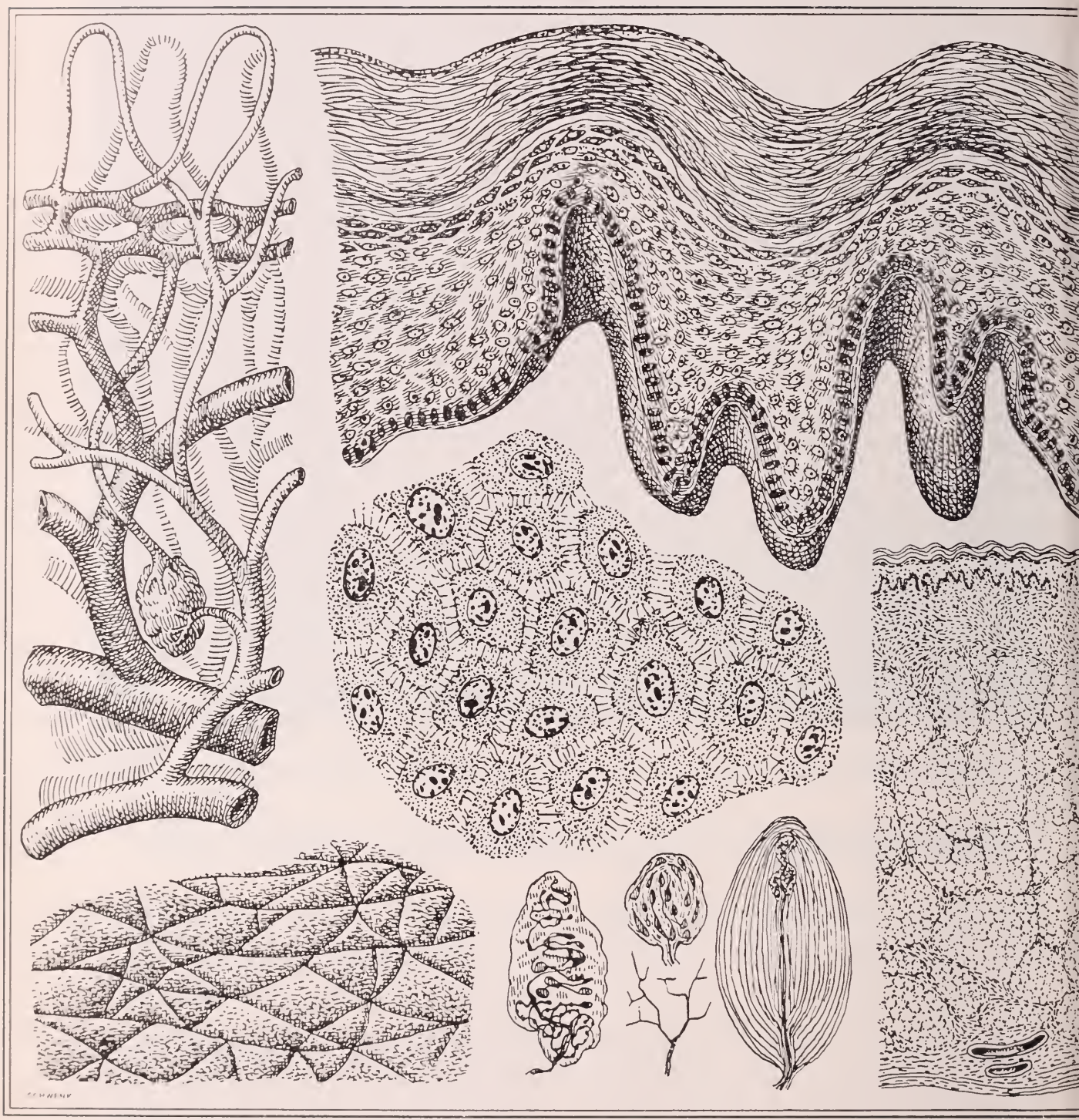
References: (1) Moyer, J. H., and Heider, C.: Am. J. Cardiol. *9*:920 (June) 1962. (2) Brest, A. N., and Moyer, J. H.: Pennsylvania M. J. *63*:545 (Apr.) 1960. (3) Hutchison, J. C.: Current Therap. Res. *4*:610 (Dec.) 1962. (4) Berry, R. L., and Bray, H. P.: J. Am. Geriatrics Soc. *10*:516 (June) 1962. (5) Feldman, L. H.: North Carolina M. J. *23*:248 (June) 1962.

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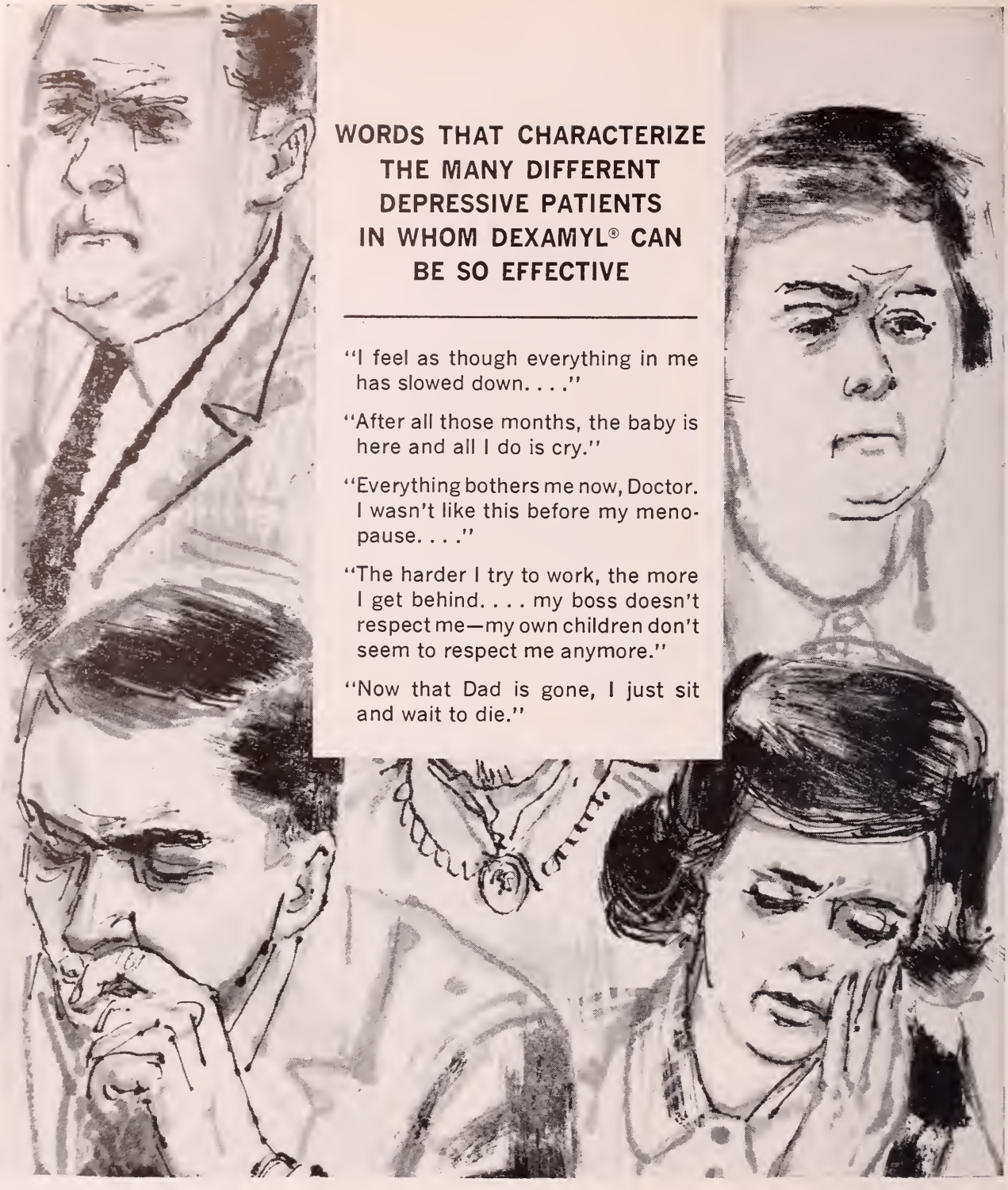
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*AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181:411-423 (August 4, 1962).

**AMA Council on Foods and Nutrition: Composition of Certain Margarines, *JAMA* 179:719 (March 3, 1962).



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75TH ANNIVERSARY ABBOTT

1. Prescribing Supplements of Dietary Fluorides, Council of Dental Therapeutics, J.A.D.A., 56:591, April, 1958.
2. Fluoride Compounds, Accepted Dental Remedies, 27th Ed.:139, 1962.

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from the feet up—clears ringworm economically with half the dosage

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R. B., a 36-year-old writer, was first seen on November 5, 1962, with severe inflammatory tinea pedis involving the sole of the right foot. There was an 8-centimeter area of erythema, with vesicles, bullae and scales on the plantar surface of the foot. The lesion had been present for two weeks. Microscopic examination of scrapings showed hyphae, and cultures grew out *T. mentagrophytes.*

The patient was started on 0.5 gm. FULVICIN-U/F (griseofulvin, *ultra-fine*) daily. Three weeks later there was distinct improvement with only mild erythema and scaling present. After one additional week, therapy was discontinued and a second culture was negative. The patient was last seen on December 24, approximately three weeks after termination of therapy. At this time the skin was entirely normal in appearance.







1 Plantar tinea pedis before therapy.

2 After two weeks of therapy.

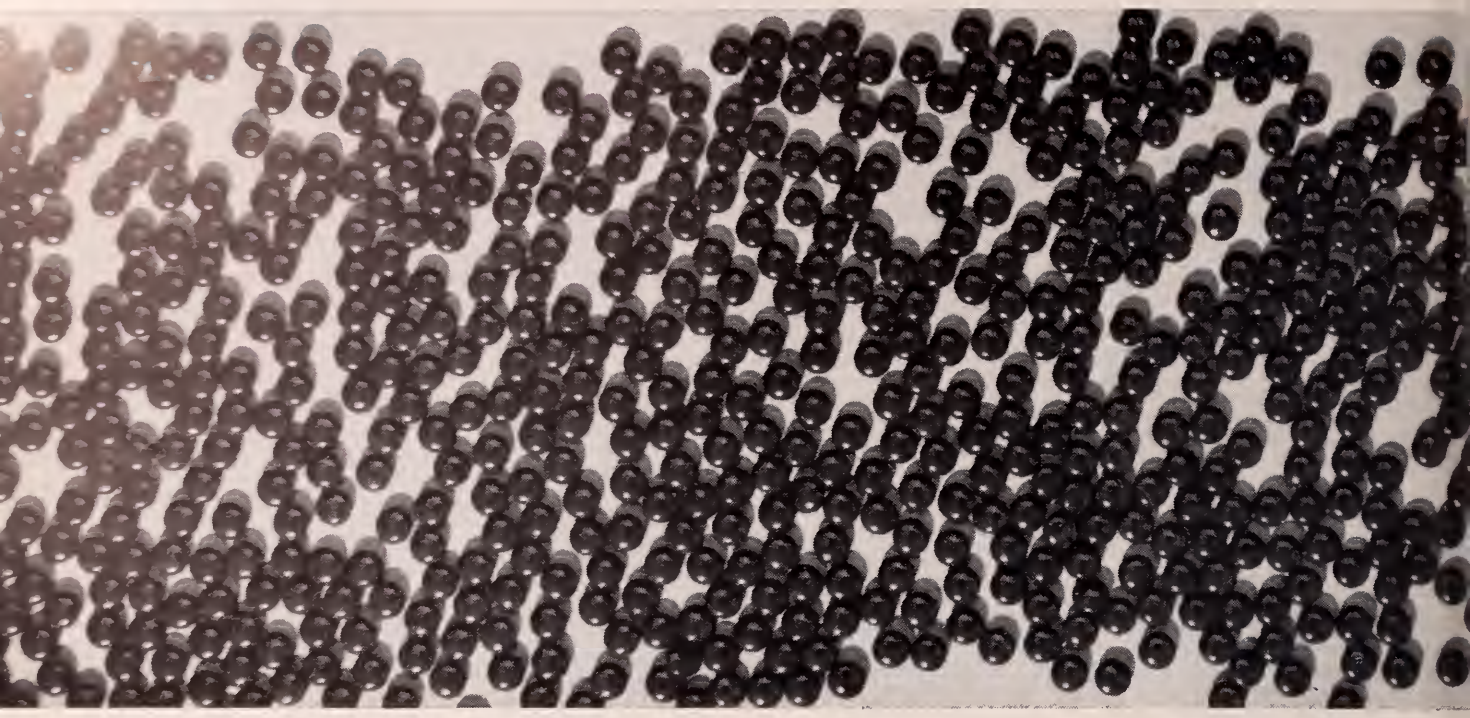
3 Six weeks later, skin essentially normal (two weeks after termination of therapy).

Clinical considerations: Although clinical studies with griseofulvin have not revealed evidence of serious toxicity, ***side effects*** — as with any potent drug or antibiotic — may occur in some patients. An occasional minor decrease in leukocyte count has been observed, which was reversible when medication was discontinued. Occasionally, there may be heartburn, nausea, epigastric discomfort, diarrhea, lethargy, fatigue, psychomotor incoordination and, during the first week of therapy, headache. Studies are in progress to determine the safety of this drug during pregnancy; until the results of these studies are available, griseofulvin is contraindicated during pregnancy. ***Caution*** should be observed in patients with known penicillin-sensitivity. Should urticaria or drug rash develop, the drug should be withdrawn. ***Available*** in 125 mg., 250 mg. and 500 mg. scored tablets, bottles of 60 and 250.

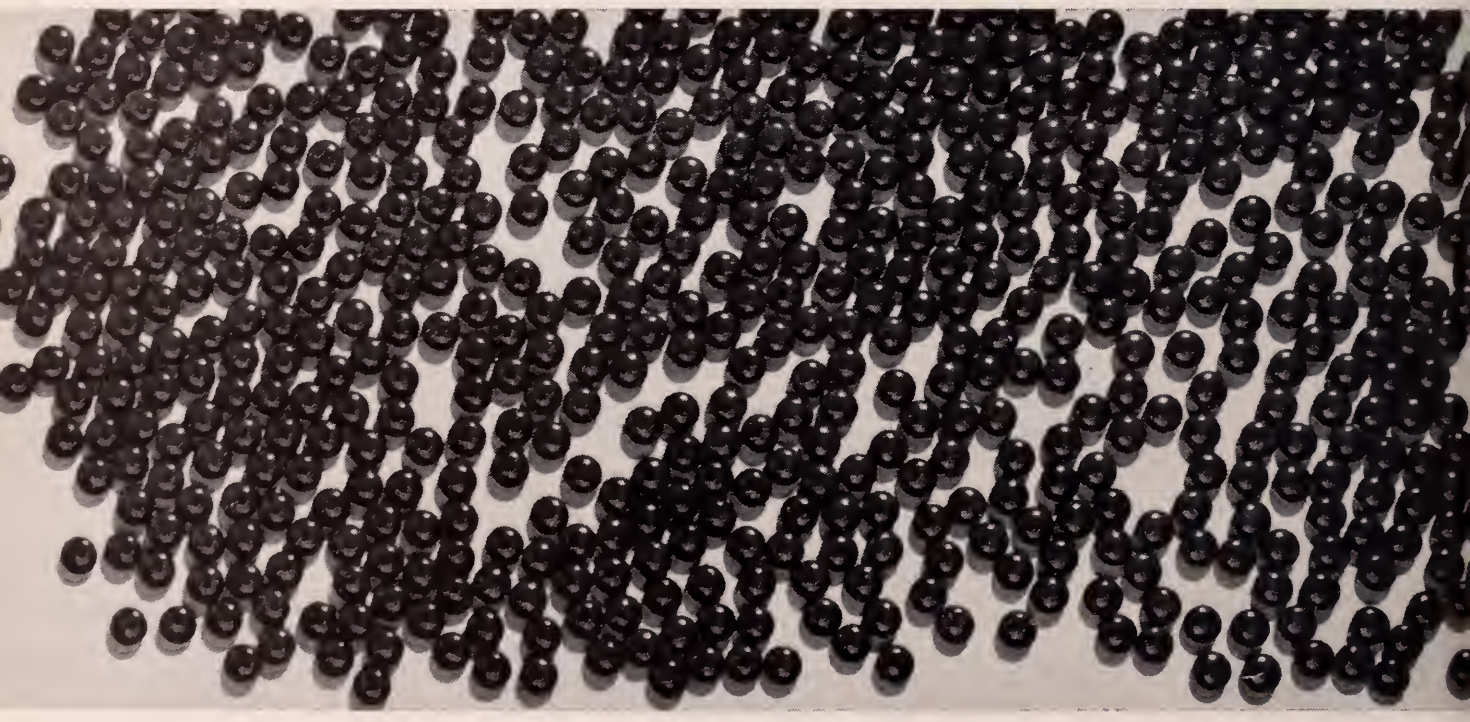
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The JOURNAL
of the Florida Medical Association

Chromoblastomycosis in Florida

Victor M. Arean, M.D.
and Louis F. Hubener, M.D.
GAINESVILLE

Chromoblastomycosis (chromomycosis) is a chronic granulomatous inflammation usually confined to the skin of the extremities which, because of its protracted course, often leads to marked disability of the affected limb. The responsible pathogenic agents, usually Fonsecaea pedrosoi or Phialophora verrucosa and, less frequently, Fonsecaea compactum or Hormiscium dermatitidis, gain access to tissues through inapparent abrasions or lacerations of skin which may heal completely before the mycotic process manifests itself clinically. As a consequence the disease is most commonly observed in males engaged in outdoor occupations, such as woodsmen, farmers and longshoremen, working barefoot or with their extremities unprotected.

Chromoblastomycosis is prevalent in hot, humid climates; hence its maximum incidence occurs in tropical and subtropical countries. Cases have been recorded, however, from other areas of the world where these climatic circumstances do not prevail, notably Russia, Australia, Uruguay, and Argentina. Recently a number of cases have been described from several Asiatic nations indicating that this infection is of worldwide distribution.

In the Americas, most cases have been observed in Cuba, Brazil and Puerto Rico, although instances of this mycosis are on record from almost all of the other South and Central American republics. In North America, up to the present time, one case, originating in Ceylon, has been reported from Canada and 26 from the United States although two of the latter represent infections acquired abroad (DeFeo and Harber, and Kaess, Reberger and Sloss). Despite the fact that the first reported case occurred in Boston (Lane, and Medlar), most instances of chromoblastomycosis in the United States have originated in the South. Aside from the relatively large number of cases noted in Louisiana (10) and Missouri (3), isolated cases have been described in North Carolina, South Carolina, Georgia, Tennessee, Texas, California, Pennsylvania, New Jersey and New York. Only one has originated in Florida (Binford, Hess and Emmons); in the patient seen by Sams, quoted by Weidman, the infection was acquired in the Bahamas.

The recent observation, over a short period of time, of two patients affected with chromoblastomycosis led us to inquire of the dermatologists in Florida as to their experience with this disease. A questionnaire was, therefore, sent to the diplomates in this specialty requesting data concerning the number of cases observed by each physician, the initials of the patients (to avoid repetition), date of examination, age of the patients, whether or not they were Floridians, and the possibility of their having lived in some other state where the disease could have been acquired.

The information obtained in this inquiry and the clinical and laboratory data in one of our cases constitute the basis of this report.

Report of Case

A 59 year old white man was seen in the Clinic because of "skin trouble and ulcers of the leg" of several years' duration. The patient stated that he had lived most of his life around Lake City, with only short intervals in Tampa and in southern Georgia. During his early life he worked as a woodsman or in sawmills, later changing to carpentry. Approximately 28 years prior to admission, he noted ulcers on the left ankle which healed temporarily and then broke down again, spreading further up the leg as time passed. The only complaints were an intense itching and burning sensation. He consulted several physicians over the years who recommended topical medication without apparent results. Aside from persistent cough there were no other significant complaints.

On physical examination relevant changes were limited to the lower extremity. Scattered all over the skin, from the dorsum of the foot to the lower third of the thigh were numerous irregular lesions (fig. 1) of three distinct

From the Departments of Pathology and Medicine, University of Florida College of Medicine, Gainesville.

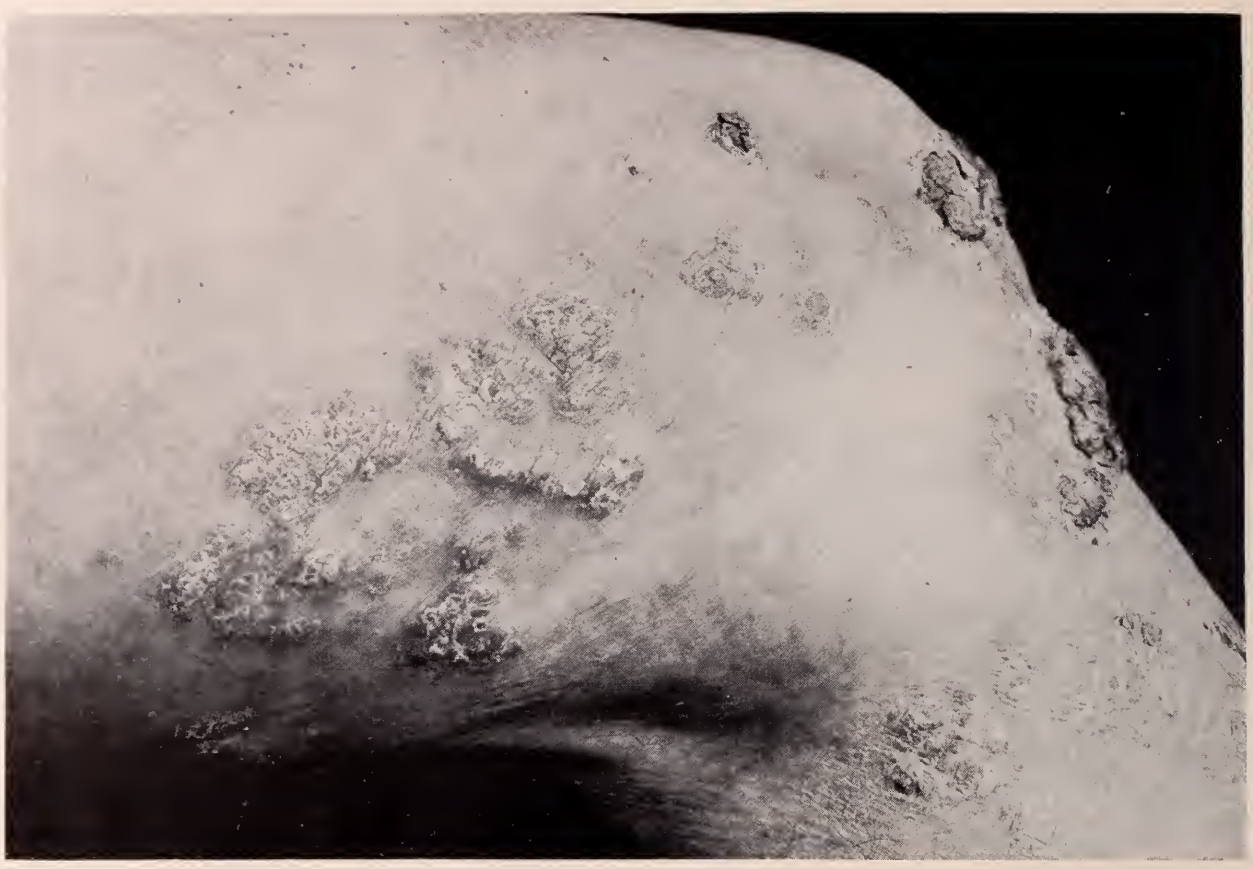


Fig. 1. — Verrucous, plaque-like and nodular lesions about the knee. Observe the serpiginous appearance of some of the lesions.

types. Some were vegetative, serpiginous, crusted and somewhat verrucous with heaped-up borders which bled readily upon minimal traumatization and varied from 1.5 to 6 cm. in diameter. Removal of the crusts allowed for the exudation of a serosanguineous material from the crevices of the lesions. They were often surrounded by, or were adjacent to, skin which was atrophic and depigmented. A second type was characterized by the presence of erythematous maculopapules with a sharp periphery. A third type consisted of discrete, roughly spherical, subcutaneous or dermal nodules varying from 0.2 to 0.5 cm., arranged in tortuous fashion as if following the pathway of dermal lymphatics. Most of the skin not involved was atrophic. The regional lymph nodes were slightly enlarged but not painful. The remainder of the physical examination was noncontributory.

Clinically, the lesions suggested either erythema induratum or some variant of blastomycosis. Because of cough, the possibility of North American blastomycosis with pulmonary involvement could not be ruled out. Roentgen examination of the chest and upper gastroenteric tract gave negative evidence. Biopsies of the skin lesions were obtained for histologic diagnosis and culture. Histologic study revealed a portion of skin with marked hyperkeratosis with crust formation and keratotic plugging of follicles (fig. 2). Moderate parakeratosis and pronounced acanthosis with club-shaped rete pegs and focal areas of pseudoepitheliomatous hyperplasia were present. The dermal papillae were broadened, edematous and infiltrated diffusely by neutrophils, occasional eosinophils, abundant plasma cells and scattered pseudotubercles. Numerous round abscesses of various sizes were noted in the dermis (fig. 3). Within these or in the pseudotubercles were clumps of dark brown, thick-walled, round or ovoid yeast cells often containing septa (fig. 4) characteristic of chromoblastomycosis. Portions of the biopsy specimen were cultured in Sabouraud's maltose agar and onto corn meal agar plates and incubated at room temperature. Growth became apparent within one week, but well formed colonies did not develop until two weeks later. At this time (fig. 5a) they appeared as raised, furred, feathery, round or oval structures with a central mammillation and varying from grayish black to black. In corn meal agar diffusion of the pigment was noted on the back of the colonies. Teased mounts were made revealing Acrotheca (fig. 5b) and Hormodendrum (fig. 5c) types of sporulation, but no phialides were observed. The mycologic diagnosis was Fonsecaea pedrosoi, later corroborated by the Florida State Board of Health Laboratory in Jacksonville.

The patient was immediately given potassium iodide, 1.0 Gm. per day, and isoniazid, 150 mg. per day, orally. He was warned of the possibility of side effects. One week later he was seen again complaining of intolerance to the medication, which he had stopped taking. Because it was thought that the intolerance was most likely due to the iodide, it was discontinued, but he was advised to continue isoniazid in the doses prescribed. Two weeks later he returned feeling well; it was then decided to reinstitute the iodide therapy in conjunction with isoniazid in doses of 1.0 Gm. per day, which he tolerated well for one week. At this time the dose of isoniazid was increased to 200 mg. per day and iodide to 1.5 Gm. per day. Within a week such nausea and vomiting developed that he could not keep down simple foods, and he stopped the medication altogether. As it was obvious that he could not tolerate an adequate dose and because no apparent improvement in the lesions was noted, it was decided to begin local infiltration of the lesions with a solution of amphotericin B in procaine as described by Costello, DeFeo and Littman. Only a few of the lesions have been treated, but in those there has been resolution or marked involution of the process.

Discussion

It is beyond the scope of this paper to give a detailed account of the historical, clinical or mycologic features of this disease, subjects which have been thoroughly covered before by other authors. Rather, we are mainly concerned with the relatively high incidence of this mycotic infection in Florida and its implications as regards diagnosis and therapy.

Our recent inquiry has revealed that among 11 of the 38 dermatologists consulted there have been 19 independent observations of patients with this mycosis during their practice in Florida. Only eight of the cases, including our own, have originated in the state, although perhaps the patients in three other cases may be originally from Florida, but information pertaining to this aspect is lacking. The remainder had contracted the infection in other states or abroad. Including the case reported by Binford and his associates, there have been, therefore, nine proved cases of this disease originating in this state, a figure which compares well with that reported by Howles and his associates from Louisiana. Of special interest is the fact that diagnosis of the disease has been made in practically every section of the peninsula, from Pensacola to Miami, indicating that whatever the natural habitat of the pathogenic fungi may be, they appear to be prevalent all over Florida. It is also apparent that more than half of the cases have originated elsewhere. It is likely that with increasing migration into the state of people from areas where the disease seems to be endemic, the observed number of cases of chromoblastomycosis will increase.

Our case emphasizes the characteristic protracted course of the infection. This is due to procrastination on the part of the patient in seeking medical advice in the early stages of the disease as well as failure of consulting physicians to establish an etiologic diagnosis. Apparently this has been the experience of other dermatologists both in Florida and elsewhere. In most instances the infection has not even been suspected and local topical therapy was applied for indeterminate periods without beneficial results. Moreover, it is not infrequent for the isolated lesions to involute spontaneously, though only on a temporary basis, such as in our case. This feature can easily be misinterpreted as the result of nonspecific topical therapy and the consequent delay in reaching a correct diagnosis.

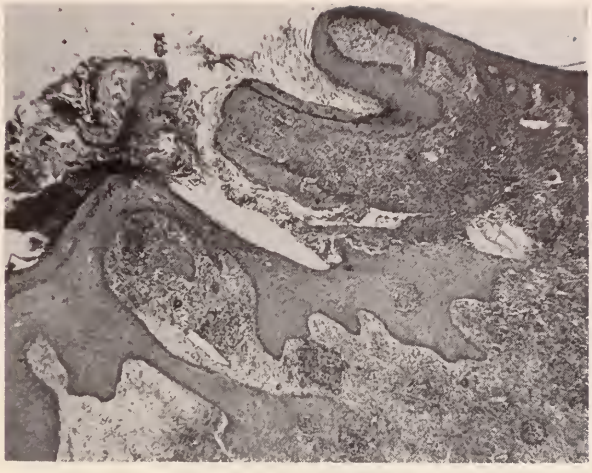


Fig. 2. — Section of a verrucous lesion showing hyperkeratosis, acanthosis and diffuse infiltrate of dermis with scattered multinucleated foreign body giant cells. X 35, hematoxylin-eosin stain.

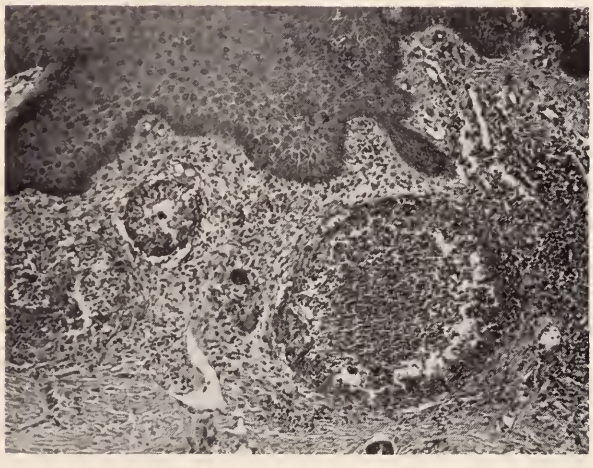


Fig. 3. — Large intradermal abscess and pseudotubercles, one containing a cluster of "sclerotic" cells of the fungus. X 180, hematoxylin-eosin.

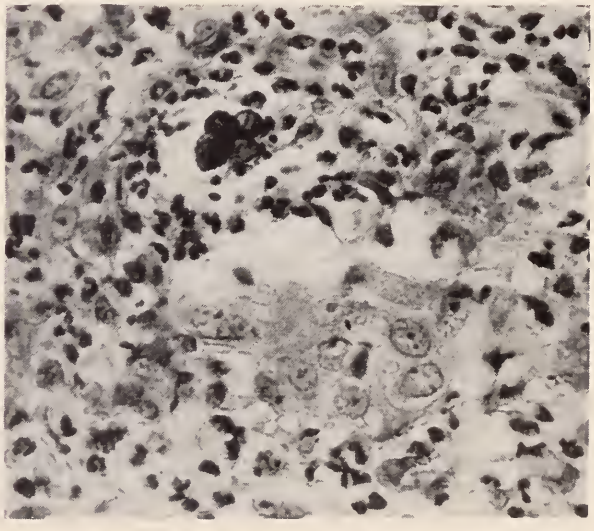
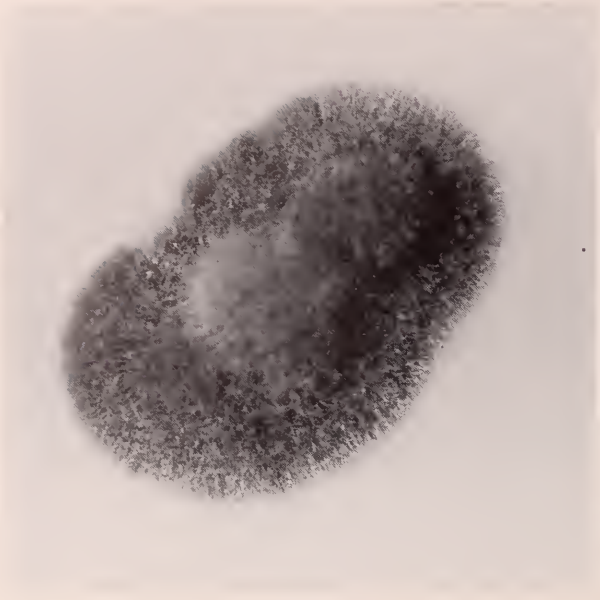
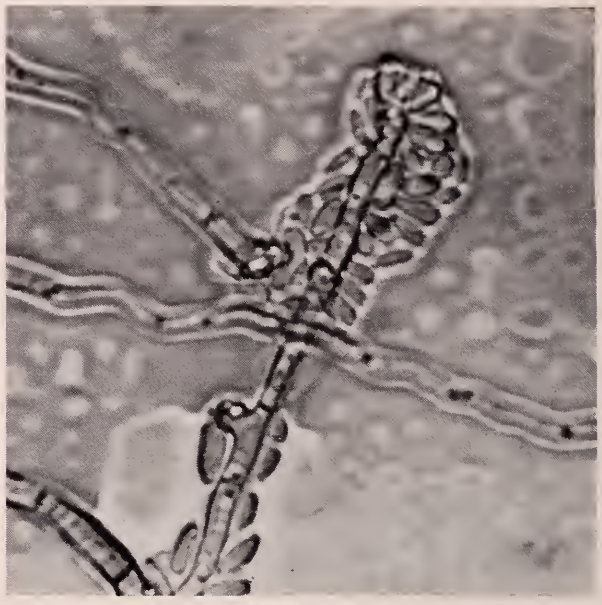


Fig. 4. — Higher magnification of the "sclerotic" or yeast elements of the fungus in a pseudotubercle. X 480. Hematoxylin-eosin. Note septa splitting the yeast cells.



(a)



(b)



(c)

Fig. 5. — (a) Colony of Fonsecaea pedrosoi growing on corn meal agar at room temperature, 21 days after inoculation. X 5. (b) Acrotheca. (c) Hormodendrum types of sporulation.

Chromoblastomycosis may mimic a number of skin disorders of various etiologies. It may simulate tuberculosis verrucosa cutis, erythema induratum, lupus erythematosus, dermatitis vegetans, blastomycosis and neoplasia among others. It is therefore of paramount importance when one is confronted with a protracted skin lesion of this type to obtain adequate material for histologic analysis as well as for cultural studies. In the large majority of cases, a diagnosis can be made on the basis of histologic findings alone for the organisms are abundant enough to be readily identified. Even when scarce, they can be detected without undue effort. When the tissue changes are such that a diagnosis is suspected but the organism is not encountered, it may be necessary to repeat the biopsy from a more active lesion and submit the tissue for histologic as well as for cultural studies. In most of the cases observed by the dermatologists in Florida, the diagnosis was made by histopathologic means; in only three cases were cultures made, two of which were reported as demonstrating F. pedrosoi and the other Hormodendrum species without further definition.

The significance and importance of an early diagnosis are stressed when the results of therapy are considered. It is now well established that the earlier the lesions are recognized or the shorter the duration of the process, the easier it is to control the infection by systemic medication. Neglect on the part of the patient to seek medical advice, or by the physician to achieve a correct diagnosis, results in a protracted course and subsequent secondary infections leading to extensive fibrosis of the dermis and atrophic changes of the skin, not to mention the involvement of more extensive areas of the adjacent skin. In such circumstances, systemic medication often fails and the only means of obtaining a cure is by radical excision of the involved skin or even amputation of the limb.

Iodides have been advocated for many years as the therapy of choice in chromoblastomycosis, although the results have been inconsistent, especially in protracted extensive infections. More recently iodides combined with calciferol or isoniazid have been reported as having achieved excellent results with sterilization of the lesions

and marked regression of the inflammatory changes. As shown in our case, however, such therapy is not always feasible when the patient shows intolerance to the large doses usually required. Iodides in combination with superficial x-ray therapy have also been used, again with irregular success.

Recently Costello and Defeo and their associates have advocated the use of local infiltration of the lesions with solutions of amphotericin B in procaine. They obtained, in two cases, fairly rapid clearing of the lesions with disappearance of the parasites both by histologic and cultural studies. The doses employed by these authors were always less than 40 mg. per site of injection; it appears that larger concentrations, besides achieving no more therapeutic effect, often resulted in sloughing of the normal skin and rather severe local pain. We have started our patient on this mode of therapy with encouraging results thus far.

Summary

The recent observation of two cases of chromoblastomycosis within a short period of time led us to conduct an inquiry among the dermatologists practicing in Florida regarding their experience with this disease in this state. In 19 proved cases, including one herewith reported, the disease has thus far been diagnosed; eight of the cases originated in Florida, and the remainder were acquired elsewhere. Adding to these the case reported by Binford and his associates brings the total number of cases in which chromoblastomycosis has been diagnosed in Florida to 20, a figure double that reported from Louisiana.

The protracted course of the illness, the difficulties in establishing a correct diagnosis on clinical features alone and the necessity of obtaining adequate biopsy material for histologic and cultural studies are emphasized. The significance of an early diagnosis is stressed and its bearing on the success of therapy remarked upon. Iodide therapy combined with isoniazid failed to give improvement in our case, but the medication had to be discontinued after a few weeks because of intolerance. Local infiltration with amphotericin B has resulted in marked improvement of the lesions thus far treated.

We wish to express our deep appreciation to the members of the Florida Society of Dermatology for their help in obtaining part of the data reported. We also wish to thank Dr. N. J. Schneider, Director of the Bureau of Laboratories, Florida State Board of Health, Jacksonville, for confirming the mycologic diagnosis and Mr. Guido Controni for his help with the cultural studies. The microphotographs were obtained with the assistance of Mr. Kenneth Brown, Department of Medical Illustration, J. Hillis Miller Health Center.

References are available from the authors upon request.

University of Florida College of Medicine

Woman's Auxiliary Convention—1963

Margaret (Mrs. Edward W.) Ludwig, of Jacksonville, President of the Woman's Auxiliary to the Florida Medical Association, has announced plans for the Auxiliary's Annual Convention on May 16, 17 and 18, at the Diplomat Hotel in Hollywood. The Broward County Medical Auxiliary will hostess the Convention.

On Thursday, May 16, the State Auxiliary Officers and County Presidents will have a Pre-Convention Board Meeting in the Card Room of the Diplomat Hotel at 2:00 p.m.

On May 17, the House of Delegates will meet at 9:00 a.m. in the Mezzanine Theater. The Convention theme will be "How Did Your Garden Grow." Besides transacting convention business, each County Auxiliary President will report on her county's projects and accomplishments for the year. Mrs. Abbott Y. Wilcox of St. Petersburg will be installed new State President at the close of the meeting. A luncheon will follow at noon in the Les Ambassadeurs Room.

The Auxiliary will enjoy the use of a Hospitality Room which the Florida Medical Association has made available to the Auxiliary members attending the Convention.

A meeting for new members will be held by Mrs. Wilcox on May 17 following luncheon. On Saturday, May 18, a Post-Convention Board Meeting and School of Instruction will be conducted by Mrs. Wilcox in the Nassau Room of the Diplomat Country Club. A Shuttle Service will provide transportation from the Hotel to the Country Club.

Mrs. James F. Berry, Convention Chairman
Woman's Auxiliary, Florida Medical Association

Emergency Care of Eye Injuries

Thomas S. Edwards, M.D.
Jacksonville

The injury to the eye constituting an emergency is of utmost importance to all physicians, not only the ophthalmologist and the general industrial surgeon, but also to the employer and employee as well. More than 300,000 industrial accidents involving the eye occur annually in the United States, resulting in the subsequent loss of vision in one eye for approximately 1,000 workers and total blindness for another 100. Whether these figures are considered from the point of view of the employee, the employer, or the insurance company, they are not very attractive. They become even less so when it is realized that 75 per cent of this blindness could be prevented if existing skill and knowledge were properly applied. Fortunately, through the educational programs being conducted by the various medical societies and by many industrial companies, this tragic loss of eyesight and of useful manpower is being curbed.

In most injuries, the first physician to examine the eye is of great importance. He not only determines the basic cause, but can render emergency care which will set the stage for all future definitive care.

First, and of extreme importance, is a short, concise but detailed medical history of the patient. It is a simple matter to instill a couple of drops of Pontocaine in the injured conjunctival sac and as soon as the patient is comfortable to delve into the history. It must include his full name, age, address, and other social information. It should include how and where he was injured and the time of the accident. If it is possible to locate a good witness who could vouch for the accident, this may be of importance in the future. Often a witness will accompany the patient, and information from him may be obtained by a secretary or nurse while the patient is being prepared for further examination. This is an ideal time to record the patient's general history and the status of his vision prior to the accident for he is likely to be extremely truthful whereas later he may have personal reasons for slightly shading the history. He is more concerned with the present damage than with any future thoughts of compensation. This is the time he will state whether he previously had a hazy or amblyopic eye. The general health is also of extreme importance for, as is generally known, diabetes and hypertension as well as many other debilities often are associated with poor vision, and a careful history at this time may go a long way in preventing future controversy.

Next, the most important single feature of a proper eye examination—utilization of the simple visual acuity chart—can be done by anyone, and a flashlight or an ophthalmoscope is not needed. If at all possible, it is essential that a visual acuity determination be made. If there is no visual acuity chart in the hospital emergency room, a satisfactory visual acuity often can be determined by simply having the patient read the fine print in the newspaper with each eye. This corresponds closely with Jaeger I.

Gross inspection is second in importance in the examination of the eye. In most cases of ocular trauma, such as a blowout fracture, only one eye is affected and the other one may be used as a control. Careful examination with a simple flashlight and magnifying lens, when possible, will reveal most ocular injuries. Transillumination over the sclera often will reveal injury that is not shown by other methods of examination. Ophthalmoscopic examination is necessary, of course, to determine the adequacy of the internal content of the eye. When other doctors are waiting to provide emergency care to the other parts of the body, these procedures can be carried out in a matter of minutes, especially in a hospital emergency room. They can be carried out by any trained physician but especially the general practitioner, general surgeon or industrial surgeon.

The types of injuries likely to be seen may be divided into three categories: chemical, thermal and mechanical.

Chemical Injuries

In chemical injuries of the eye, emergency first aid care rendered by the injured man himself, by his friends, or by personnel in the first aid station is of utmost importance. If time is

Read before the Atlantic Coast Line Railway Surgeons, Ponte Vedra, March 2, 1962.

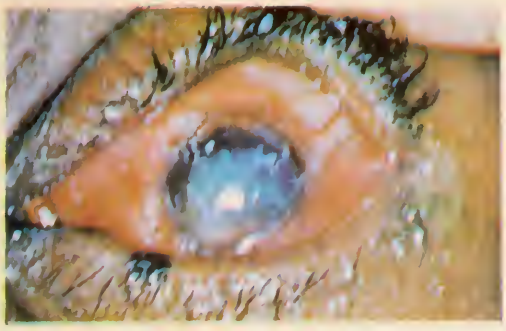


Fig. 1. — Severe alkaline burn shortly after injury.



Fig. 2. — Traumatic iridodialysis showing large tear of the root of the iris.

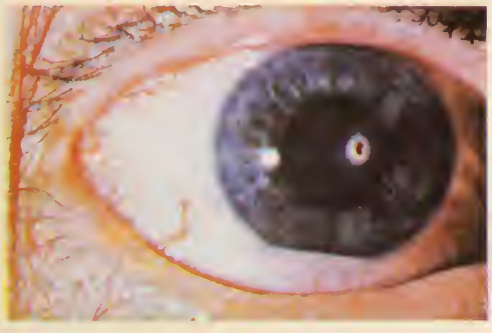


Fig. 3. — Old corneal foreign body with infection and hypopyon (level of pus in the anterior chamber).



Fig. 4. — Pseudomonas ulcer three days after treatment for corneal abrasion.

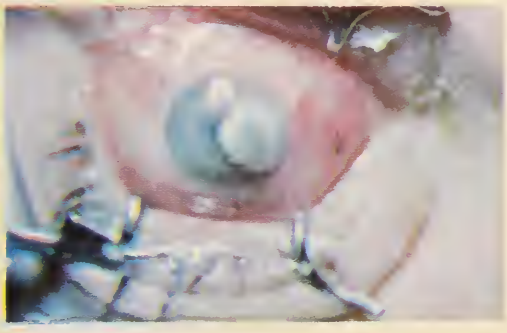


Fig. 5. — Monilia ulcer from a corneal abrasion in a patient under heavy steroid therapy.



Fig. 6. — Intraocular foreign body embedded in the iris.

Color photographs courtesy of Burroughs Wellcome & Co., Inc., Tuckahoe, N.Y.

wasted in trying to find a proper, perfect solution with which to wash the eye, irreparable damage may be done. The important criterion is the time interval between the burn and the washing, not the solution to be used.

In figure 1 can be seen an acute sodium hydroxide burn. Note the deep burning caused by the alkalies. This is in contrast to the acid burns where more swelling and acute reaction occur, but there is quicker limitation. The end result of old chemical burns is visual impairment from marked scarring and heavy inflammation. With chemical burns, there must be repeated copious washings.

Thermal Injuries

The treatment of thermal injuries is of great importance; however, the damage is done at the time of injury and careful washing will do no good. Any object which has caused the thermal burn should be removed as carefully as possible. Adjacent skin burn is always associated with the usual thermal eye burn, and the condition basically requires ophthalmic ointment on the burn, bandaging, and usually administration of a cycloplegic to prevent spasm of the ciliary muscle.

Ultraviolet or flash burns of the cornea can be extremely painful with the symptoms arising from four to eight hours following the exposure. A single application of an anesthetic eye drop usually will relieve the pain temporarily; however, the repeated application of the drop is detrimental to the eye because the healing process of the epithelial layer may be retarded. In patients with this type of injury it is best to bandage both eyes firmly and systemically give analgesics and sedatives for the first 24 to 48 hour period, if they are needed.

Mechanical Injuries

Mechanical equipment is the most common cause of ocular injuries. Beginning externally, lacerated eyelids would be first. The industrial or general surgeon most likely would be the first to examine these injuries. The adequacy of the first aid care or emergency treatment frequently determines the final cosmetic result, both functional and visual.

Careful examination of the wound would show whether the skin only or the deeper layers of the lid and possibly the globe itself are involved. The possibility of one or both canaliculi being involved should always be borne in mind when the wound is near the inner angle of the eyelids. Such wounds frequently bleed copiously since the area is richly supplied with blood vessels; however, bleeding can be stopped usually by compression and hot applications. Occasionally, large arteries must be picked up with hemostats and ligated. If the damage to the eyelids can be treated immediately, the wound should be thoroughly irrigated with sterile saline solution and all foreign matter removed. All tags of skin should be carefully retained and the lesion carefully closed. The ophthalmologist is aware of the importance of the precise, exact repair of wounds of the eyelids; unfortunately, other physicians, who are likely to see the patient first, may overlook this necessity.

There is no need to repair immediately major lid lacerations involving the lid border, the lacrimal drainage system, or the levator muscles. These wounds can be closed later after definitive care is completed in the event there are injuries to other parts of the body. Lid injuries should be closed by an ophthalmologist, a plastic surgeon or an industrial surgeon familiar with the integral repair of the eyelids which is necessary to obtain the optimal result.

The contused eyeball is one of the most common injuries encountered and should not be dismissed as a simple black eye, even though it may seem benign. If there is any hemorrhage into the eyeball, it can become a major injury. An iris tear, or iridodialysis, may develop (fig. 2). In this type of injury, the patient should promptly be sedated, and after the eye has been bandaged, referred to an ophthalmologist who, in most cases, will hospitalize the patient with orders for heavy sedation, antibiotics and, at times, steroid therapy. Atropine is definitely contraindicated at this stage, although the ophthalmologist may administer a very short-acting cycloplegic. If there is only traumatic cyclitis or iridocyclitis, the eye should be bandaged, and the patient should be given a sedative and referred to the ophthalmologist for a more careful examination. This condition will occur almost invariably from two to five days following a contused eyeball and is a frequent cause of painful eyes for which the employee is believed to be "goofing off," since it arises several days after the injury. This is an ocular emergency and should be seen by the ophthalmologist for careful treatment as it could lead to more serious complications and possibly blindness.

Foreign bodies in the cornea, as shown in figure 3, are probably the most frequent of all eye

injuries. Many instruments are available for removing them, such as specially made spuds. One very satisfactory instrument is the 23 or 25 gauge hypodermic needle on a small syringe used frequently in hospital emergency rooms. Only those experienced in removing foreign bodies from the cornea and having a knowledge of the depth of the cornea should use the needle; otherwise, it is best to attempt washing out the embedded corneal foreign bodies with a strong jet of water. It is imperative that cotton-tipped applicators not be used to wipe corneal foreign bodies from the cornea for they usually will do more harm than good by leaving a dangerous abrasion.

In examining the eye for corneal foreign bodies, it is essential to look under both the upper and lower lids. These particles may be embedded there and thus scrape across the cornea creating numerous corneal abrasions.

After the foreign body has been removed, the lesion should be treated as a corneal abrasion. In all abrasions of this type one must, needless to say, look for an embedded foreign body. It is sometimes necessary to stain the eye with fluorescein to find properly the pathway of the abrasion which will frequently indicate the location of the causative factor such as a foreign body of the lid; however, care must be exercised in using fluorescein eye drops, swabs, or stain filter paper. Fluorescein acts as an excellent culture medium for several bacteria and has definitely been incriminated as the infecting agent in many conditions leading to blindness as in the case of Pseudomonas ulcer (fig. 4). After the corneal abrasion has been carefully cleaned and all debris or foreign bodies removed, a short-acting cycloplegic and bacteriocidal solution should be instilled and the eye firmly bandaged. Since, in many of the injuries, a secondary cyclitis develops, the short-acting cycloplegic should be used; however, caution must be used since it is possible to bring about an attack of acute glaucoma with a cycloplegic. The need for the bacteriocidal solution is self evident. I prefer Neosporin* or some other combination of antibiotics which are not given systemically so that if an allergy develops, the patient has not been sensitized to an important systemic medication. Neosporin also has a very broad spectrum effective against most bacteria.

*Burroughs Wellcome & Co., Inc., Tuckahoe, N. Y.

At no time should a corneal abrasion or an injury by a corneal foreign body be treated with cortisone. Cortisone will make the eye feel and look better, but it decreases the eye's resistance to infection and has positively been incriminated in many corneal ulcers, both from a bacterial and fungal etiology such as the monilia ulcer in figure 5. Cortisone should not be used when the surface of the eye is broken, and it is the opinion of some ophthalmologists that cortisone should be used by nonophthalmologists only in severe acute allergic conjunctivitis.

The perforating eye injuries are acute ocular emergencies. The eye should be bandaged, the patient sedated and then referred to the ophthalmologist. It might be best to determine whether the ophthalmologist would prefer to see the patient in his office or in the hospital. In the patient with steel in the iris (fig. 6), the wound showed up better with the office equipment than it would have had he gone to the hospital. Frequently the ophthalmologist would prefer to have the patient come to the office so that he can be properly examined, since few hospitals have the necessary instruments and equipment.

Summary

All physicians should be able to render emergency first aid care to any eye injury. This emergency care frequently will cast the die as to whether the patient will have a good seeing eye or become another statistic among the "Aid to the Blind." One must be able to perform a quick, careful examination of the eye and then determine the necessary future treatment. Needless to say, the physician must be able to recognize his limitations and be guided by them. Many ocular emergencies can be treated definitively by a good, well trained industrial surgeon, and indeed it is only just and right that he treat them. Most eye injuries, however, and all severe ones, should be transferred as quickly as possible to the ophthalmologist so that he may proceed with definitive care, securing the best ocular and visual results possible, and returning a healthy employee to work.

Marshall Taylor Doctors Building.

Wringer Injuries

With Special Emphasis on Those in Adults

Arthur I. Gilbert, M.D.
Clinton L. Border Jr., M.D.
and John J. Farrell, M.D.
Miami

While the majority of wringer injuries occur in children, adults do incur this type of trauma and usually demonstrate a more complex injury associated with an increased incidence of complications. When MacCollum[1] in 1938 first applied the term "wringer injury" to this trauma, there were 13,000,000 wringer-type washing machines in the United States. Surprisingly, 21 years later, of the 4,100,000 washing machines sold in this country in 1959, over 900,000 had wringer attachments.[2] Our present series representing a four year period consists of 75 patients admitted to the Surgical Service of the Jackson Memorial Hospital with this diagnosis. Of these 10 were adults, eight of whom showed significant injury requiring an operative or orthopedic procedure.

The high incidence of complications of a wringer injury in an adult is related directly to the physical features of the extremities. In an adult the soft tissues of the arm have less elasticity and the bones are larger and more brittle than those of a child. Fractures are more common in the older age group.

The pathogenesis of the injury is that of a severe churning force which grinds away at the superficial and deep tissues of the extremity. Entin[3] separated the different destructive forces into compression, rotation and stripping. The combination of arterial spasm and venous obstruction is of prime importance. Extravasation of blood and serum into fascial and subfascial planes devascularizes the tissue by an intrinsic pressure effect. The superficial tissue, namely the skin barrier, may then break down and thus allow infection to compound the already serious problem.

Entin[3] made studies using rats and dogs to demonstrate some metabolic and histologic changes in crushed extremities. Comparing the crushed extremity to the opposite uninjured control limb, he was able to demonstrate a mean potassium loss from 8 per cent to 20 per cent. The mean sodium increase in the crushed extremity ranged from 317 per cent at two hours to 243 per cent at 48 hours. "Microscopic examination showed marked edema, extravasation of blood into subcutaneous and subfascial tissues and between muscle bundles. Later changes included necrosis of skin and ulcer formation."

One can well visualize this mechanical monster devouring the extremity of an unsuspecting adult or an inquisitive child. Despite efforts of the victim to resist the pull of the rollers, the extremity continues to be swallowed up until the pull of the machine cannot overcome the angle of a joint. Whether this point is just distal to the thumb, at the antecubital fossa or at the axilla, the rollers continue to turn and do their damage to the compressed tissues. In cases where the victim is strong enough to pull the affected limb from the machine, the destructive force is duplicated over the previously damaged tissue. In these latter instances the amount of skin loss is usually greater and is initially manifested as full thickness avulsion flaps (fig. 1). This compounding of the injury is obviated when the safety release mechanism is used and the extremity gently removed from between the rollers.

Blount[4] pointed out that fractures may occur primarily or secondarily as the delayed pathologic type. The actual pressure of the rollers may primarily fracture the affected bone. Delayed fractures seem best related to extensive soft tissue injury including the arterial and venous supply of the bones. This secondary type of fracture is caused by the actual wringer injury. Initially no fracture is present, but at some later time the pathologic fracture may occur. Usually this late fracture is precipitated by some minimal bruise or the application of force on or by the extremity.

Management

Treatment of this injury in the past five years throughout the United States has been almost standardized. Some investigators have utilized minor differences in the basic plan. Initially it must be appreciated that the extent of injury is

From the University of Miami School of Medicine and Jackson Memorial Hospital, Miami.

difficult to assay on one examination. Whenever possible, hospital admission is advisable, even if only for a 24 hour period of observation. After examination of the extremity for possible nerve and arterial injury, a roentgenogram is made from the fingers to the proximal limit of the injured area. Although fractures are of secondary importance initially, one can be misled unless full knowledge of the skeletal continuity is ascertained. Roentgen examination is important if for no other reason than that malpractice implications can mushroom out of not utilizing this basic diagnostic tool.

With employment of sterile technique the extremity is gently washed with pHisoHex. Devitalized tissue is debrided; lacerations are sutured. In cases of exposure of a major vessel or nerve, the patient is taken to the operating room. Under either regional or general anesthesia, the wound is thoroughly debrided; then it is covered with full thickness skin from an uninvolved area. This coverage is best accomplished by a pedicle flap technique so that vascularity of the covering skin is assured. Hardin and Robinson[5] successfully employed this technique in eight patients out of a group of 20 who needed some form of skin coverage. The dressing is carefully applied by initially wrapping each digit with a strip of gauze impregnated with petroleum jelly. The digits are kept separated by small dry sponges. The gauze strips are then applied to the extremity covering the most proximal injured area. Because of progressive edema we prefer the application of these strips in the longitudinal axis of the bones. Care is taken not to apply a potentially constricting gauze strip. Kerlix is next used in a circumferential wrap, but kept loose enough to allow for the expansion of edema. An elastic bandage is finally applied, but again so loosely that it exerts only enough pressure to prevent elevation of underlying tissue flaps. We utilize the elastic bandage primarily to keep the underlying dressing intact and to allow facility in elevation of the affected limb. A few strips of adhesive tape applied longitudinally over the dressing can be connected to an intravenous stand at the bedside. We think this final step is important because it allows for continued elevation even in the most active children. We have not been as satisfied with the results obtained by having the patient elevate the extremity on pillows. The attachment to an intravenous stand permits the patient to ambulate while continuing the desired elevation (fig. 2).



Figure 1



Figure 2

While the patient is in bed, the arm is surrounded by ice packs. This measure, in addition to elevation, is helpful in decreasing the edema formation.

The timing and technique of subsequent dressing changes are important. It is essential in the first two days of hospitalization to inspect the extremity every 12 hours. Thereafter, the dress-

ing may be changed daily or discontinued, depending on the extent of damage. The technique of dressing is the same as on admission. If trophic changes are not apparent after 36 to 48 hours, the patient can usually be treated at home without danger of loss of skin. In cases where blood or serum accumulates, it will have become manifest by the second day. Treatment for such a fluid collection is evacuation. Either needle aspiration or incision with drainage may be used; we prefer the latter method. Evacuation of these fluids will, many times, obviate the slough of overlying skin and the need for grafting.

Analysis of Series

In the present series covering the period from August 1957 to July 1961 there were 65 children and 10 adults. The mean age in the adult group was 58 years. The age of the oldest patient was 82 years and of the youngest patient 23 years. The mean age of the children was four years, the age of the youngest being two years and the oldest 11 years. The sex incidence in the adult group was 80 per cent female and 20 per cent male. In the children's group 54 per cent of the injuries occurred in females, 46 per cent in males.

The period of hospitalization reflects the more serious problem in the adult group. The mean number of hospital days for the adult group was 11.3. In the children's group it was four days.

In the total group of 75 patients, 34 left the hospital by the second day with no apparent injury. In this uninjured group were 32 children and two adults. A second group of 21 children left the hospital with mild to moderate second degree skin loss. The lesions all healed completely without any grafting procedure. Five adults and two children presented with lacerations which were treated by debridement and primary suturing. In one of the adults a distally based palmar flap was sutured primarily. Only 50 per cent of the flap remained viable; the sloughed area was subsequently covered with a graft. In two patients, third degree skin loss occurred.

A child lost most of the skin of an axilla; this was satisfactorily grafted. One adult sustained full thickness skin loss at the antecubital fossa which also required grafting. The accumulation of serum or blood occurred in six patients, four adults and two children. One of these had needle aspiration of the fluid collection; the other five had incision and drainage. In each the result was good. Fracture occurred in seven patients, three of whom were adults. In one child bilateral forearm dislocation occurred. We know of no instance of pathologic fractures in this series. A résumé of the statistics is contained in table 1.

Table 1.—Wringer Injuries

	Child		Adult	
	Number	Per Cent	Number	Per Cent
No complications	32	49.2	2	20
Complications requiring a surgical procedure	9	13.8	8	80
Laceration	5	7.6	2	20
Blood or serum accumulation	2	3.1	4	40
Third degree skin loss, grafting required	2	1.5	2	20
Second degree skin loss, no grafting required	21	32.3	0	0
Complications requiring an orthopedic procedure	5	7.6	3	30
Radius and ulna- middle third	0	0.0	1	10
Index finger- middle phalanx	0	0.0	1	10
Index finger-proximal phalanx	0	0.0	1	10
Supracondylar	2	3.1	0	0
Radial distal epiphysis	1	1.5	0	0
Bilateral forearm dislocation	1	1.5	0	0
Colles' fracture	1	1.5	0	0

Of the 10 adult patients included in this series only two sustained no significant injury. In the remaining eight patients damage to the extent of requiring some operative or orthopedic procedure was required. Thus, 80 per cent of the adult group sustained significant damage. In the children's group similar magnitude of injury occurred in 16.9 per cent of the group, or 11 out of the 65 children. This type of injury in an adult means prolonged hospitalization and loss of useful time from work and home. Also, it usually necessitates some operative treatment.

Summary

The wringer injury is a form of crush injury still seen with reasonable frequency.

The basic pathologic process is due to pressure with resultant arterial insufficiency and venous obstruction.

Damage is usually limited to the soft tissue, but fractures and dislocations do occur.

The adult sustains a more damaging wringer injury than does the child. Diminished tissue elasticity, larger more brittle bones and generally larger extremities account for the higher incidence of complications in the adult group.

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1150 Southwest First Street (Dr. Gilbert).
7210 Red Road (Dr. Border).
1000 Northwest Seventeenth Street (Dr. Farrell).

THERE IS SOMETHING FOR YOU AT YOUR EIGHTY-NINTH ANNUAL MEETING DIPLOMAT HOTEL, HOLLYWOOD-BY-THE-SEA

Daily Schedule, Association Activities

Wednesday, May 15

9:00 a.m.	Set Up Exhibits	Hotel Convention Hall
2:00 p.m.	Registration Desk Opens	Foyer, Hotel Convention Hall
2:00 p.m. to 4:30 p.m.	Registration of Delegates	Corridor, Hotel Convention Hall

Thursday, May 16

8:00 a.m. to 9:30 a.m.	Registration of Delegates	Corridor, Hotel Convention Hall
9:30 a.m.	First Session, House of Delegates	Hotel Convention Hall
11:00 a.m.	Annual Meeting, Blue Shield	Hotel Convention Hall
2:30 p.m.	First Scientific Assembly	Hotel Convention Hall

Friday, May 17

8:00 a.m.	Board of Past Presidents Breakfast	Sky Room (Lower)
9:00 a.m.	Scientific Film Program	Hotel Convention Hall
	Reference Committee No. 4	Card Room
9:30 a.m.	Reference Committee No. 3	Tack Room
10:00 a.m.	Reference Committee No. 2	Embassy Room (W)
10:30 a.m.	Reference Committee No. 1	Embassy Room (E)
11:00 a.m.	General Session (President's Guest Speaker)	Hotel Convention Hall
2:00 p.m.	Second Scientific Assembly	Hotel Convention Hall
6:30 p.m.	President's Reception	Poolside

Saturday, May 18

All Day	Meetings of Specialty Societies	

Sunday, May 19

8:00 a.m. to 9:30 a.m.	Registration of Delegates	Corridor, Hotel Convention Hall
9:30 a.m.	Second Session, House of Delegates	Hotel Convention Hall
12:00	Adjournment	
1:00 p.m.	Post-Convention Board of Governors Meeting	Card Room
	Florida Medical Foundation	Card Room

Clinicopathological Conference

University of Florida College of Medicine

D. R. Shanklin, M.D., Assistant Professor of Pathology and Pediatrics
Myron W. Wheat Jr., M.D., Associate Professor of Surgery

A 61 year old spinster, a native of Florida, was admitted to the University of Florida Hospital seven days prior to death because of jaundice of approximately one month's duration.

Present Illness.—The patient stated that she had enjoyed good health until six months prior to admission when she noted the insidious onset of easy fatigability, loss of energy, lethargy, and a tendency to sleep more than usual. She later noted a tendency towards cold intolerance, and some puffiness of the face and swelling of the feet and lower legs developed. She continued to work as a store clerk until one month prior to admission when she stopped because of the appearance of jaundice. She denied any antecedent signs of abdominal pain, indigestion, nausea, vomiting, change in bowel habits, hematemesis, melena, chills, fever or night sweats. She consulted a physician at this time who suspected hepatitis and advised her to adhere to bed rest at home. She was given an unknown oral medication. The onset of jaundice was associated with very dark urine and light-colored stools, both of which persisted, and during the month prior to admission there was progressive deepening of the jaundice. The patient denied pain or vomiting, but experienced progressive anorexia and weakness. There was an increase in the previously described swelling without associated change in weight.

Past History.—The patient had "influenza" in 1918 and 1936. Five years prior to the present illness she fractured her right ankle, and thereafter swelling of the right lower leg persisted. Two years prior to admission, an infection of this leg, diagnosed as erysipelas, responded promptly to penicillin and did not recur. She denied further significant illnesses.

Family History.—The father died of "kidney disease" at age 71, and the mother died of "heart attack" at age 75. One sister died of "heart and kidney trouble" at age 45. Four other siblings were living and well. There was no family history of tuberculosis, diabetes or cancer.

Review of Systems—Head: The patient had experienced occasional dizziness and tinnitus for several years. Members of her family had noticed some slowness of speech for several months. Cardiorespiratory: Negative. Gastrointestinal: See present illness. Genitourinary: The menopause had occurred at age 40 without subsequent vaginal bleeding or discharge. She denied all the common symptoms of urinary tract disease. Neurological: Negative.

Physical Examination. — The temperature was 98.6 F., pulse rate 80 and regular, respirations 20 and blood pressure 136/60 mm. Hg. The patient was a short and rather plump elderly woman who appeared chronically ill but not in distress. Her memory seemed good, and her speech was clear but very slow. Marked jaundice and moderately severe puffiness of the face and eyelids were present. There was also generalized edema with 2 to 3 plus pitting of the legs and over the back and sacrum. The skin was cool and dry with pronounced icterus. The hair was coarse and somewhat sparse with marked thinning of the eyebrows. The eyes showed a considerable degree of scleral icterus; the pupils were regular and equal and reacted to light; the fundi were normal. The mouth was edentulous. The ears were normal, and the neck showed no tenderness, nodes or masses. The thyroid was not palpable. The lungs were clear to auscultation and percussion. The heart was not enlarged to percussion; the sounds were within normal limits

with the aortic second sound greater than the pulmonic second sound; there were no murmurs, gallop or rub. The abdomen was rounded and slightly distended with fullness in the flanks and a questionable fluid wave. There was mild generalized tenderness with no point of maximal tenderness. A sense of fullness to palpation in the right upper quadrant was noted, but no mass could be palpated or percussed. Likewise, the liver could not be palpated or percussed and the spleen could not be felt. Bowel sounds were normal. There was mild tenderness at the right costovertebral angle. On pelvic examination, stenosis of the vaginal introitus was present and the remainder of the examination could not be performed. No abnormal masses were noted or tenderness detected on rectal examination. The uterus was palpated and felt small in size. The extremities were unremarkable except for the edema described. Neurological examination was unremarkable except for the marked slowing of the relaxation phase of the deep tendon reflexes.

Accessory Clinical Findings. — Urinalysis showed pH 5.5, specific gravity 1.005, albumen 1 plus, sugar negative, and on microscopic examination white blood cells 10 to 15 per high power field with some clumps and numerous bacteria. A urine culture grew Escherichia coli. The test for bile was positive. Urobilinogen was within normal range. The hemogram showed red blood cells 3.03 million, hemoglobin 10.6 Gm., white blood cells 22,650, with a differential count of 69 per cent segmented forms, 23 per cent stab forms, 5 per cent lymphocytes, and 3 per cent monocytes. Serum bilirubin totaled 35 mg. and indirect 13 mg. per hundred milliliters. The blood urea nitrogen was 42 mg. per hundred milliliters on admission and 53 mg. on the second hospital 122 mg. per hundred milliliters. Serum amylase day. The total serum protein was 3.4 Gm. per hundred milliliters with 1.4 Gm. albumen and 2.0 Gm. globulin. The alkaline phosphatase was 12 Bodansky units. Cephalin flocculation was 4 plus and protein-bound iodine 1.3 mcg. The Kahn test was negative. The fasting blood sugar was was 110 units. Blood culture revealed no growth. The stool was clay-colored but positive for blood. A repeat urinalysis on the third hospital day revealed 2 plus protein and many white cells.

X-Rays.—An anteroposterior film of the chest revealed many linear infiltrations in both lower lobes, more on the right with some elevation of the right diaphragm. The abdomen showed moderate distention of the colon with gas and was otherwise unremarkable. The upper gastrointestinal series revealed what was thought to be edema of the mucosa in the midportion of the stomach. The stomach appeared to be displaced to the right by a gas-filled colon, and there was thought to be slight forward displacement of the antrum. A large diverticulum was noted in the third portion of the duodenum. Compression of the duodenal cap was noted and was thought to be related to an enlarged liver or possibly an enlarged gallbladder. Hypoproteinemia was suggested as a possible cause for the gastric edema.

Course in the Hospital.—The patient was given thyroid extract 32 mg. daily, Achromycin and a high protein, high carbohydrate diet. She became progressively anorexic, and nausea and vomiting developed on the third hospital day, but she denied any pain. She was then maintained on intravenous fluids containing glucose, but went rapidly downhill over the next several days with the development of progressive lethargy, weakness and a tendency to sleep almost constantly. Surgical exploration was not considered advisable because of her extremely poor condition. On the sixth hospital day she became markedly stuporous and was incontinent. She later lapsed into coma and became hypothermic with a rectal temperature of 96 F. Terminal hypotension developed, and she expired quietly on the seventh hospital day.

Dr. Myron W. Wheat Jr. (Associate Professor of Surgery):

In studying this case it seems to me that there are three apparent significant disease processes. The most important process and probably the one responsible for the death of the patient is carcinoma of the head of the pancreas.

The case for a diagnosis of carcinoma of the head of the pancreas is so strong that it almost makes me suspect that some other diagnosis is probably the correct one. This patient was an elderly white female with a history of progressively severe painless jaundice for about one month prior to her admission to the hospital. She had dark urine and light stools but without a history of loss in weight. This latter factor could have been masked by enough increase in body water to offset the loss in weight seen frequently in patients with carcinoma of the pancreas. Physical examination revealed a plump and chronically ill white female who was markedly jaundiced with moderately severe puffiness of the face and eyelids and considerable edema over the sacrum and in the legs. The ascites and edema of the lower

extremities most likely were due to partial obstruction of the hepatic and other regional lymphatics by extension of the neoplasm. Examination of the abdomen revealed probable ascites but no palpable gallbladder. The fact that the patient was short and plump and had a distended abdomen with ascites could very well have hidden even moderately large masses including a distended gallbladder. Even definite evidence of the lack of distention of the gallbladder, however, would not seriously rule out carcinoma of the head of the pancreas since Courvoisier's law can be wrong in some 30 to 50 per cent of cases. No rectal shelf was felt so that I would not expect the patient to have extensive peritoneal involvement by the malignant process.

The laboratory findings that support such a diagnosis are those of a bile-positive urine, a total serum bilirubin of 35 mg. per hundred milliliters with the indirect being 13 mg. The stools were clay-colored and positive for blood. I consider the blood in the stool quite important since this usually means involvement of the duodenum, usually in the region of the ampulla by carcinoma with erosion or ulceration of the surface. Such ulceration results in recurrent blood loss of small degree which is still detectable in the stool. A hemoglobin value of 10.6 Gm. per hundred milliliters in such a patient would fit with this type of chronic blood loss. It would have been helpful to have documented whether or not this was of a hypochromic microcytic type which would be stronger evidence of the low hemoglobin being due to blood loss in a woman past the menopause. Obstructive jaundice due to a benign source with a concomitant finding of blood in the stool would be most unusual.

The finding of an elevation in the cephalin flocculation test is not a rare finding since chronic obstruction can be accompanied by ascending infection of the bile ducts. The surprising finding of a low alkaline phosphatase, however, is disturbing, but since it seems isolated and out of keeping with all of the other evidence, I suspect it represents a laboratory error. Also, the amylase of 110 units is compatible with chronic pancreatic duct obstruction. After ligation of the pancreatic duct it is known that the serum amylase will return to normal in several weeks. The upper gastrointestinal series showed the stomach to be displaced to the right with anterior displacement of the antrum and possibly some edema of the mucosa of the midportion of the stomach. All of these findings fit perfectly with a mass in the head of the pancreas with extension of the process into the lymphatics of the surface of the stomach producing extrinsic pressure and edema of the stomach. A further bit of support comes from the additional findings of the compression of the duodenal cap which was thought to be due to an enlarged liver or enlarged gallbladder.

Carcinoma of the stomach could produce all of these findings with the obstructive jaundice secondary to direct extension of the carcinoma around the common bile duct or by involvement of the lymphatic system. Actually, this is probably the best bet as an alternate diagnosis but again unlikely because of the paucity of gastric findings on x-ray examination. Although it is possible for a small gastric carcinoma to produce extensive spread outside of the stomach, the manifestation of carcinoma of the stomach as progressive painless jaundice with minimal intragastric findings is certainly rare when compared with the presentation of such a case due to carcinoma of the head of the pancreas. Parasitic cyst of the liver and primary hepatic tumors do not seem to me to warrant significant consideration.

Probably the next most important consideration in a differential diagnosis would have to be a perinephric abscess on the right side. A large abscess medial and anterior to the right kidney could produce, by pressure and by adjacent edema and lymphadenopathy, obstruction of the common bile duct and displacement of the stomach. The patient had a strong family history of kidney disease, findings compatible with anasarca possibly due to renal failure and a 1 plus albumin in the urine. The urine also contained fair numbers of white cells with clumps of bacteria which proved to be E. coli on culture. The reversal of the albumin-globulin ratio and an elevated blood urea nitrogen are also evidence for renal disease. On the other hand, there was no history of chills and fever to suggest a significant infectious onset and no pain, particularly no flank pain or tenderness. I think it would be distinctly unlikely that an infection severe enough to produce an abscess large enough to produce obstructive jaundice would not show some signs of sepsis and local findings of pain and tenderness to go with it. Also, retroperitoneal abscesses are more prone to move superiorly, inferiorly or laterally along the planes of the fascia and present in these areas long before they become large enough to produce significant obstructive symptoms by anterior displacement. A small perinephric abscess with

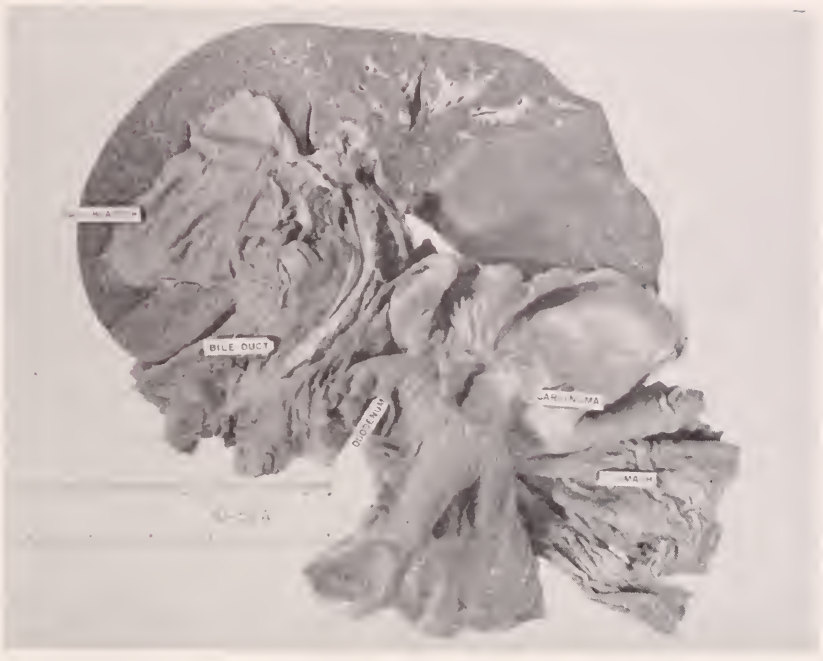


Fig. 1.—Gross view of stomach and liver area. The ulcerating but still small carcinoma of the stomach is well defined. A somewhat dilated gallbladder but no distention of the bile duct system is apparent. The irregular pattern of the liver was intensely jaundiced.

septic involvement of the vena cava and liver with liver abscesses such as one sees in pylephlebitis could explain many of the findings here, but would not be apt to produce a picture of painless jaundice of the obstructive type. Also the displacement of the stomach with the edematous gastric mucosa and the guaiac-positive stools could not be explained, plus again the absence of evidence of sepsis.

A common bile duct stone seems unlikely in the absence of a history of previous cholecystitis and the lack of symptoms of pain or cholecystitis at this time. The common duct stone again would not cause the displacement of the stomach and guaiac-positive stools.

The next process to be considered is that of myxedema. The history of cold intolerance with slow speech, sparse coarse hair and thin eyebrows, the slowing of the relaxation phase of the deep tendon reflexes and the protein-bound iodine of 1.3 mcg. all seem to substantiate the presence of myxedema in this patient. At this age and with a fairly recent history the most likely cause of the hypothyroidism is thyroiditis. To postulate that the presence of myxedema could hide or mask the presence of significant sepsis such as that due to a large perinephric abscess seems possible but not likely.

Clinical Diagnoses

Obstructive jaundice due to carcinoma of the pancreas
Hypoproteinemia with ascites and anasarca
Azotemia

Dr. Wheat's Diagnoses

Carcinoma of the head of the pancreas
Myxedema secondary to chronic thyroiditis
Chronic pyelonephritis

Dr. D. R. Shanklin (Assistant Professor of Pathology):

This sixty-one year old female store clerk has three principal disorders. One of these has led directly to her death; the others have contributed to her lack of well-being and to her physical appearance.

As is often the case, death is best ascribed to a complex of factors. Foremost among these seem to be an acute progressive renal failure and bacterial toxicity due to an acute suppurative pyelonephritis. This has been an ascending infection as evidenced by the greater severity of the process in the papillae and scant involvement of the subcapsular cortex. No anatomical ureteric obstruction, however, was found at autopsy. Numerous microabscesses and extensive tubular necrosis dominate the renal picture. Moderate numbers of bile casts are present, but their frequency is not equivalent to the inflammatory process and a toxic nephrosis does not exist per

se. No specific obstructive factor, however, is apparent grossly.

The jaundice is apparent also in the liver. There are acute and chronic cholangitis and early biliary cirrhosis. Some hepatic cell necrosis is present. There is not a definitive obstruction of the extrahepatic biliary system, the common duct having a diameter of 4 mm. and the main hepatic duct having a diameter of 3 mm. The hilar hepatic nodes are enlarged and do press on the duct, however, and a small nonocclusive stone is present within the hepatic duct. There is no distention proximal to this point. Thus an intermittent or mild continuing functional stenosis of the duct may be postulated on the anatomic evidence. These nodes show a marked sinusoidal histiocytosis but no metastases. In the prepyloric antrum of the stomach, there is a slightly raised firm ulcer measuring 25 mm. in diameter. This is not fixed posteriorly and microscopically it is seen to be a poorly differentiated adenocarcinoma arising from the mucosa of the stomach. Microscopically it penetrates through to the subserosal lymphatics. A number of small hepatic metastases up to 15 mm. in diameter are noted. Very little of the liver substance, however, is involved. No other metastases are found.

The final process of importance is in the thyroid. An extreme and profound atrophy of the acini with fibrosis and nodular lymph aggregates is present. Much of the gland shows the Hürthle cell change. No neoplastic tendency is noted. There is virtually no functional parenchyma. This change is perhaps best considered as an extremely late phase of struma lymphomatosa. A post-toxic state of the thyroid gland is ruled out by the absence of significant history in this direction. There are other confirmatory signs of hypothyroidism particularly in the skin and its appendages.

Thus, three processes in this patient have contributed to the outcome. The first and predominant one is an acute suppurative infection in the kidney; interference with appropriate function of the liver and jaundice have augmented the effect of bacterial toxicity and nitrogen retention. The malignant process in this patient cannot be considered important per se. Finally, the ability of any person in a hypothyroid state to marshal properly the resistive forces to infection as well as to metabolic abnormalities is to be considered of significance in this patient.

Anatomical Diagnoses

Chronic suppurative pyelonephritis with tubular necrosis
Acute and chronic cholangitis with early biliary cirrhosis and jaundice
Chronic thyroiditis with myxedema
Ulcerating gastric carcinoma with occasional microscopic hepatic metastases

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Gastric Hypothermia in Perspective

Surgeons frequently have taken the lead to find nonoperative therapeutic measures. The recent introduction of gastric hypothermia for treatment of certain gastric conditions is an example. Unfortunately, the hoard of science writers, whose headlines are aimed at capturing the attention of readers, prematurely flooded the lay press with accounts of the method before it was evaluated completely.

The publicity accorded gastric hypothermia has misled the public and created problems for physicians as evidenced by the fact that patients are now demanding treatment of their ulcers by this means. Naturally, the method is appealing to patients since the glowing accounts infer that gastric hypothermia can provide definitive treatment without risk and without operation. Lacking experience with gastric hypothermia, the physician who must advise the patient is in a difficult position because he is unable to find adequate information regarding its morbidity and mortality to say nothing as to how low or for how long it will depress gastric acidity. As yet these questions remain unanswered by the originators of the method.

The concept of hypothermia for the control of hemorrhage is as old as Hippocrates, who was familiar with the value of ice and snow for this purpose. Even the idea of gastric hypothermia is not new for James Arnott in 1852 treated cholera by perfusion of the stomach with saline at -3 C. While gastric cooling has been used previously in the control of bleeding of the upper part of the gastrointestinal tract, the current wave of enthusiasm is dependent upon the work of O. H. Wangensteen and his group, who perfected the machine and the technique for performing this procedure. The careful experimental studies performed in his laboratory suggest that control of bleeding by hypothermia depends upon inactivation of gastric juice, reduction in blood flow to the stomach with concomitant reduction in secretion of gastric juice.

That gastric cooling is not a panacea for control of bleeding of the upper part of the gastrointestinal tract is best exemplified by the most recent publication of S. L. Wangensteen. In his study, gastric cooling was utilized in a series of 60 patients who were considered unsuitable for emergency surgery. Bleeding was uncontrolled in 13 per cent and the direct cause of death in 11 per cent. The over-all mortality of the group was 57 per cent. Mechanical rupture of the stomach occurred in two patients and is a complication which has been reported by others. Unfortunately, controls were absent in this study as in all studies which have extolled the virtues of gastric cooling.

There is no doubt that gastric hypothermia is a valuable adjuvant in specific cases. We have had the occasion to control hemorrhage by this means in patients where the situation otherwise seemed hopeless. It should be remembered, however, that bleeding in the majority of patients stops spontaneously when managed by the conventional, nonoperative techniques. Until the limitations of the method are recognized more fully, it seems appropriate to limit gastric cooling to the smaller group of bleeding patients in whom the operative risk is prohibitive or in whom operation is technically precluded.

Operative mortality in the face of massive gastrointestinal hemorrhage, especially in the elderly patient, greatly exceeds that of elective operation. If massive hemorrhage can be controlled by gastric hypothermia in these patients, they should be prepared for elective operation rather than to procrastinate in the hope that permanent control has been achieved. By this program, conversion of an emergency operation to an elective one might increase the salvage rate in this difficult group of patients. If bleeding cannot be controlled by hypothermia after seven to eight hours, the decision to operate must be made before deterioration of the patient's condition relegates operation to the status of a technical exercise.

The position of "physiological gastrectomy" by gastric freezing for the definitive therapy of duodenal ulcer hangs by a more tenuous thread than does gastric cooling for control of bleeding. Early reports of this method were enthusiastic for it is a method purported to provide cure without the fear and risk of operation. It is not time-consuming and can readily be repeated if it fails on the first attempt. These features are indeed appealing to the patient and also to the physician who is anxious to give his patient the best care with the least risk. Theoretically, treatment of duodenal ulcer by freezing depends upon the reduction of gastric acidity by (1) direct injury of the parietal and chief cells, (2) reduction in the secretory influence of the vagus nerves upon these cells and (3) reduction in the release of gastrin from the antrum.

There are at least two lines of evidence which suggest that the results achieved by gastric freezing will be less than hoped for. Lippman and Longmire demonstrated in dogs that removal of the gastric mucosa superficial to the muscularis mucosae was followed in eight to 17 weeks by regeneration of the mucosa which was normal in gross and microscopic appearance. It would produce acid when stimulated with histamine. Secondly, the attempt to control gastric secretion in duodenal ulcer patients by radiation therapy has been unpredictable and of short duration. Both studies raise the question as to how long and to what degree suppression of gastric secretion can be expected following cold injury of the gastric mucosa. Indeed, evidence is beginning to accumulate, although not yet in the literature, that reduction of gastric secretion following gastric freezing is unpredictable and that the magnitude and duration of reduction are less than one would consider acceptable for therapeutic purposes. Success of gastric freezing is predicated upon the hypothesis that severe thermal injury of the gastric mucosa will decrease gastric secretion by the three mechanisms mentioned. If it subsequently should be shown that achievement of these objectives is associated with the production of an atrophic nonfunctioning gastric mucosa, this will indeed be a high price to pay for treatment of duodenal ulcers.

It has been stated that gastric freezing can be repeated on several occasions if necessary. This statement implies that the technique is not unpleasant and that there is no risk to the patient. Neither of these assumptions is true, particularly the latter one, for indeed the originators of the technique have already encountered a significant incidence of complications such as bleeding, gastric ulceration, perforation and death. These complications have also been encountered by others.

At the present time, treatment of duodenal ulcer disease by vagotomy and pyloroplasty is so satisfactory it seems unwarranted to permit the lay press to influence patients and coerce physicians to accept a method of treatment which has not yet proved itself and in fact has already demonstrated limitations, which in time may be demonstrated to be of considerable magnitude. It would seem wise to reserve gastric freezing for the poor risk patient in whom operation is permanently precluded or as a method to control production of gastric secretion for a short period in patients in whom extenuating circumstances require that definitive surgery be delayed. It cannot go without saying that the introduction of gastric freezing by one held in such scientific esteem as Dr. Wangensteen makes it mandatory that we continue to view the subsequent results of the method with an open mind. It may be that with time our opinion will change, but for the moment we should proceed with caution.

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President's Page

The Education of A. F. Map (Conclusion)

Two years ago in accepting my election to the office of President-Elect I stated in the House of Delegates that I had learned something about myself which to me was new: I had learned that I reacted to the occasion very much as my predecessors had, with no more elan, no more composure than had been evidenced by any of the 15 or more previous presidents-elect whom I had seen on similar occasions. And so it has been throughout the past two years as I have experienced the same situations with the same reactions as those who preceded me. For this reason I thought that The Education of A Florida Medical Association President might be an apt subject for my last "President's Page."

The first reaction was one of *appreciation.* Appreciation for the confidence of my friends, especially those of my own county medical society who knew so well my deficiencies and yet who are still my friends; and appreciation to friends throughout the state who were willing to entrust me with a responsibility the magnitude of which I am only now understanding. The next feeling was that of being *overwhelmed.* There are close to 100 appointments to be made to positions of responsibility. These have to be made by districts and should be made in a manner to give all areas, all types of medical practice, a voice in Association government and yet at the same time should go to doctors who are interested in the organizational aspect of their profession and who will work. This alone takes close to six months of study and correspondence. And this period is followed by one of *relief* in finally getting the job done; but this is short-lived because as it begins, the term of office of President-Elect ends.

As I assumed the office of President, my greatest feeling was of *gratitude,* gratitude for that fine gentleman, Dr. Carnes Harvard, who preceded me as President, and who had made me a partner in his every activity during his term of office as President. To know this man is to love him and it has been my privilege to know him well. And gratitude to the House of Delegates for selecting as my successor that genial gentleman from Georgia via Coral Gables, Dr. Warren Quillian. As a working teammate Dr. Quillian has offered sage advice and homespun humor which have been the saving grace on many occasions. I could not possibly have had two finer men with whom to work than my predecessor and successor. For this I am still grateful.

It was not long before I began to have a rather awful feeling of *responsibility.* Suddenly there are decisions to be made. Political, social, economic decisions which may affect many people, decisions in many fields in which I am no expert, decisions which even with competent advice involve a large measure of personal responsibility. This was often accompanied by a strong feeling of *frustration,* of trying to be a part time statesman, part time doctor, part time father, part time husband while being a full time taxpayer and not feeling that I was doing a very good job of any of it.

And as the end approaches, all this is followed by a sense of *relief,* relief that more things did not go wrong, that many decisions which appeared questionable at the time turned out all right after all, and relief that soon a good man will be taking my place. Then there is a feeling of *appreciation* again. Appreciation for the fine young men who work for us in our office. To Harold Parham, Al James, Gene Nixon, and Tom Jarvis, and to the ladies of the secretarial force I give my heartfelt thanks. I am convinced that we have in our Association office the very best. This thanks I extend to the fine gentlemen who served on the Board of Governors. There could not have been a more congenial, more dedicated or more effective group.

And the final feeling is one of *hope.* Hope that my best has been good enough. Hope that the confidence of my friends has been justified. Hope that I have not earned a preacher's comment at the graveside of the loser in a cutting scrape, "He fit a good fight, but his razor was dull."

Robert E. Gellner



Editorials

Chromoblastomycosis

Every true physician enjoys the experience of now and then making a rare or unusual diagnosis, the more so when such a diagnosis makes possible a specific plan of treatment as opposed to hit-and-miss symptomatic therapy. This is especially gratifying in the area of fungous or parasitic diseases in which one can actually imprison the etiological "culprit" on a slide or test plate, thus providing concrete diagnostic proof. That some may have been missing such opportunities is pointed up in an article in this issue of The Journal by Doctors Arean and Hubener on chromoblastomycosis which, though hardly a disease seen in the average physician's everyday office practice, may be a great deal more common than realized.

Previous reports in the literature have indicated mainly scattered cases in the United States, with a preponderance of cases from the South, and a concentration of 10 in the New Orleans area as the greatest number reported from any one state. The results of the authors' survey indicating that 19 cases have been observed by 11 of 38 Florida dermatologists is impressive.

In the New Orleans series, the duration of the disease ranged from six months to 20 years, in six cases being three or more years and in eight cases two or more years. One can easily see that the tendency of individual lesions to heal temporarily even when untreated would lead to false interpretation by the patient and confusion for the physician. In a disease of such protracted nature, however, one wonders how many physician visits were involved before the correct diagnosis was established. In view of the radical nature of the treatment sometimes required for persistent chromoblastomycosis, the poorer response to treatment of the long-standing cases, and the promise given by early reports concerning local infiltration with amphotericin B, there is no question that the need for early recognition is increased. With the incidence apparently much greater than suspected, it is well that physicians should be alerted to this diagnostic possibility when confronted with granulomatous skin lesions.

Even for those who never see a case of chromoblastomycosis, there is a "moral" or lesson inherent in the article by Doctors Arean and Hubener, applicable to many more areas of practice — in specific, the need for establishing one's diagnosis as adequately as possible when dealing with a dermatitis, an anemia, a diarrhea, or what have you before beginning treatment. This is not to suggest that the whole diagnostic armament be mobilized in every case, or that empiric treatment is not sometimes justified, but only that in instances of apparently refractive disease more basic efforts at proper diagnosis may save the patient much suffering and incidentally improve his opinion of the medical profession.

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Ocular Trauma

It is surprising how much direct blunt force the eye can withstand without bursting. The fibrous tunic of the eye, made up of the sclera and cornea, is very tough. This strength and a recessed location in the bony orbit form an excellent protective mechanism. In spite of this, the more delicate contents of the eye suffer fairly frequent damage in this active mechanical environment in which we live.

In this issue of The Journal, Dr. Thomas S. Edwards has clearly described the varied types of injury that befall the eyes in industry. This

paper should prove interesting to all physicians. These injuries are the type that any physician may be called upon to treat, and are conditions that any physician should be able to handle as an emergency until more specific care can be provided.

Along with the many things we can do for emergencies, it is well to consider some of the things we should not do. One of the most common medications found in industrial first aid rooms is a tube of Butyn ointment. This is frequently given to employees with almost any kind of eye injury. It is one of the worst offenders in producing complications and delayed healing. Many people are allergic to this agent, and there are numerous better medications to use in the eye. As Dr. Edwards has pointed out, topical anesthetics retard healing of epithelium, and so it is better to resort to systemic analgesics and sedatives.

A penetrating wound of the eye should not be overlooked because of regarding a wound of the upper eyelids as a minor injury. What appears to be a small or even tiny wound of the skin of the lid may in reality hide a small but none the less serious puncture wound of the upper portion of the sclera. This is easy to detect if it is kept in mind.

Another injury which is sometimes detected too late to get proper treatment is penetration of the eye by a small metallic foreign body. Eye patients with certain histories should arouse suspicion of an intraocular foreign body. The man who was hitting a steel chisel or punch with a hammer and had some pain when something hit him in the eye should be regarded as having a foreign body in the eye unless proved otherwise. A small metallic foreign body can often be removed leaving vision unimpaired. This type of foreign body left in the eye will surely cause the eye to become blind.

Marion W. Hester, M.D.
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Wringer Injuries

Wringer injuries are seemingly becoming less frequent, probably because of the advent of clothes dryers and coin laundries. Perhaps one generation hence, these injuries will be as rare as gumma or smallpox.

The extensive crushing effect, while rarely resulting in fractures, causes major disability. The use of proteolytic enzymes in recent years hastens the convalescence and speeds the resolution of ecchymosis and contusions. Skin grafting is frequently necessary because of inadequate pedicle of the avulsed skin or inability to evacuate the hematoma resulting from ruptured subcutaneous veins, usually of the dorsum of the hand.

In children the avulsion of the skin is usually in the upper arm and axilla because of the traction of the rollers.

The intensive care as an inpatient is emphasized as recommended by Gilbert, Border and Farrell in their article elsewhere in this issue of The Journal. Actual evaluation or assessment of the soft tissue damage cannot be made early, but rather after 24 to 48 hours when the vascular or nerve tissue embarrassment becomes apparent.

Unfortunately, safety releases have not proved effective in prevention of wringer injuries.

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Association News

Board of Governors Meets in New Board and Conference Room



The first meeting of the Board of Governors in the new Board and Conference Room of the Florida Medical Association headquarters building was held April. 7 The room is included in the addition, completed in late February, that also provides enlargement of the clerical area. Members of the Board include (left to right) Dr. Henry J. Babers Jr., Gainesville; Dr. Warren W. Quillian, Coral Gables, President-Elect; Dr. Leo M. Wachtel, Jacksonville; Dr. Chas. J. Collins, Orlando; Dr. Ralph S. Sappenfield, Miami; Dr. Edward L. Cole Jr., St. Petersburg; Dr. Robert E. Zellner, Orlando, President; Dr. Samuel M. Day, Jacksonville, Secretary-Treasurer; Dr. S. Carnes Harvard, Brooksville; Dr. H. Phillip Hampton, Tampa; Dr. Eugene G. Peek Jr., Ocala, and Dr. Charles Larsen Jr., Lakeland. Dr. Burns A. Dobbins Jr., Fort Lauderdale, was not present at the time the photograph was made. Mr. W. Harold Parham, Executive Director of the Association, is shown seventh from the left.

President's Guest
For 1963 Annual Meeting
May 16-19, Diplomat Hotel
Hollywood-by-the-Sea



Mr. Hruska

Roman L. Hruska, a United States Senator from his native state of Nebraska, received his academic schooling at the University of Omaha, attended the University of Chicago Law School and Creighton University College of Law in Omaha, where he was graduated in 1929. He then practiced law in Omaha until he was elected to the Congress. During that period, covering more than two decades, he held many responsible posts at the county and state levels. A Republican, he was elected to the House of Representatives for the Eighty-Third Congress and served from January 1953 until November 1954, when he resigned to serve the unexpired four years of the term of the late Senator Hugh Butler. In 1958 he was re-elected for a full six year term. He is a member of the Appropriations Committee and the Judiciary Committee of the Senate and serves on many subcommittees. He devotes much time to committee work where legislation is drafted, defects are corrected and improvements are worked out.

Senator Hruska will be the featured speaker at the General Session of the Annual Meeting, scheduled for 11 a.m. on Friday, May 17.

Third National Congress on Voluntary Health Insurance and Pre-Payment

Under the auspices of the American Medical Association, The Third National Congress on Voluntary Health Insurance and Pre-payment was held in the Palmer House in Chicago on February 15 and 16, 1963. Approximately 250 persons from almost every state in the Union and Canada attended the meeting, among whom were representatives of each state medical association as well as major metropolitan medical societies. Key men from commercial insurance companies and Blue Plans and representatives from both labor and management also attended and actively participated in the meeting.

The program was presented not unlike a case presentation at a clinicopathologic conference, with the patient's name in this instance being Voluntary Health Insurance. The "patient's" past history and accomplishments were reviewed under the program title "Accomplishments of Yesterday." The "patient's" present state of health and the chief complaints about his health were reviewed in a critical fashion under the heading "Where Do We Stand Today?" The panel of experts and consultants declared our "patient" to be in pretty robust health save for certain ailments that were present for which some wisely conceived therapeutic regimens were suggested in the final portion of the program entitled "Where Do We Go From Here?" In general the prognosis looked good with the "patient" growing stronger day by day.

The contributions of the medical profession were ably presented by Dr. F. J. L. Blasingame, Executive Vice President of the American Medical Association. Progress reports on past accomplishments by Blue Cross and Blue Shield Plans

and private insurance companies also were presented to the delegates. Spokesmen for both labor and management also told how their respective groups have been privileged to share in the growth and development of voluntary health insurance in the United States.

Mr. J. F. Burke, co-chairman of the Sheet Metal Workers Welfare Fund of southeastern Pennsylvania, in his presentation, was quite critical of the efforts of the medical profession and the American Medical Association. Despite continuing attempts by American Medicine to enlighten the public on the pitfalls of Medicare for the aged and government interference in the practice of medicine, still Mr. Burke made this statement, "Our most serious current and public disagreement with the AMA has developed because of the King-Anderson Bill even though it does not directly affect doctors." He went on further to say, "Strangely enough, in the economics of the struggle itself, the AMA seems to be able to and does raise an enormous amount of money to carry on its fight while the Labor Movement has but little comparatively. . . We (meaning Labor) do, however, have the advantage of the fact that there are more of us."

Having read for years of the large sums of money which are available in union treasuries, I found it intriguing to hear the latter statement presented. In this connection, Mr. Burke pointed out that there were many in labor but comparatively few doctors and he suggested that medicine should join with labor if we in medicine wish to have a greater impact on legislation pending in the Congress. He went on to add that if we, as physicians, wish to increase the support of labor in the field of health care legislation, then we in turn must give labor spokesmen a greater voice in decisions relating to medical economics, hospital administration and utilization controls. In the opinion of this observer, labor's participation in the Congress on Voluntary Health Insurance could be summed up as an "ultimatum" to the medical profession.

In the sessions concerned with the topic "Where Do We Stand Today?" much of the talk, both in the formal sessions and the round-table discussions, dwelt on the quality of medical care that people are receiving today and on the topics of utilization and possible overutilization of hospital and health care facilities.

The highlight of the Congress, at the conclusion of a general question and answer period, was an address by our own Dr. Edward R. Annis, President-Elect of the American Medical Association. His remarks can only be described as brilliant in their utter simplicity and logic. His challenging remarks were welcomed by a standing ovation which was unanimous save for a few representatives of labor who remained seated and busied themselves by putting papers away in their brief cases.

I returned from this Third National Congress on Voluntary Health Insurance and Pre-payment with this one main thought which I would like to pass on to my fellow physicians. Voluntary health insurance has made tremendous strides in the last decade. It is ever improving its scope of benefits and enrolling increasingly greater numbers of people, young and old. The representatives of both the commercial insurance companies and the Blue Plans all stated that private insurance can do a better job of providing voluntary health insurance coverage for all of the people without further government intervention than is already on the statutes.

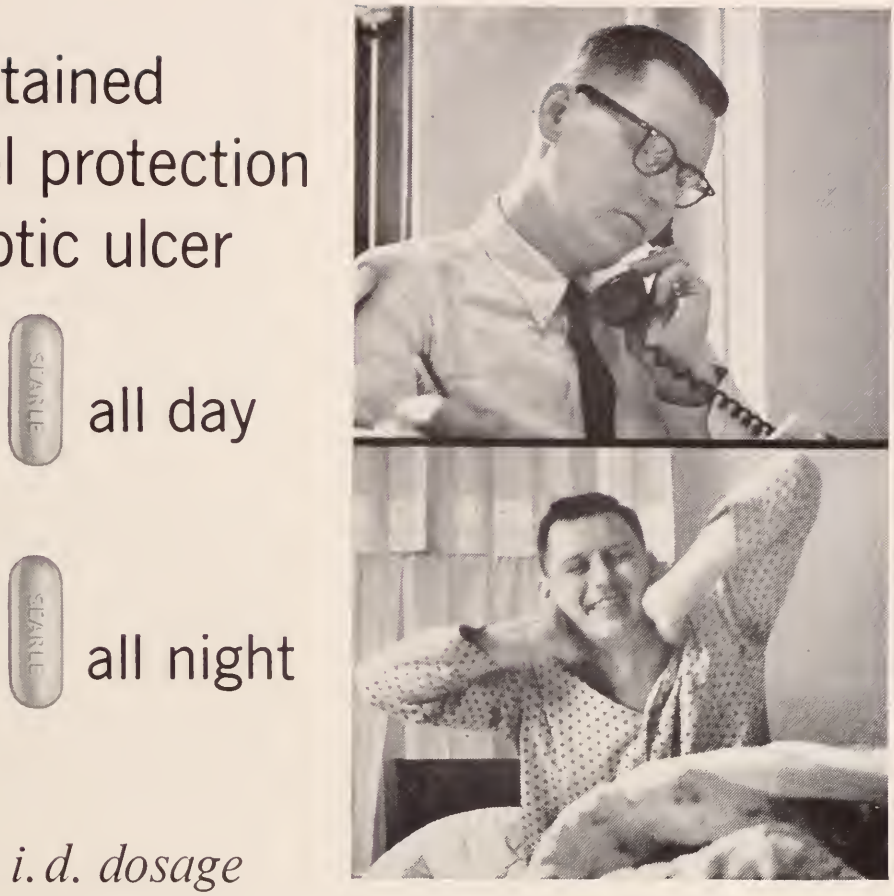
While the private insurance companies are extremely competitive with the Blue Plans, they seem to be fully cognizant of the vital need of all agencies which provide health care insurance to cooperate and fight at every turn government intervention in the field of health care.

It is my belief, after returning from this Congress, that each practicing physician must examine daily his "medical conscience" to see whether or not he is providing the best quality care of which he is capable. Each doctor should ask himself these questions at the end of his daily tour of duty: "Am I ordering unnecessary laboratory tests?" "Is there a patient I can send home from the hospital one day sooner and thus do my share of holding the line on rising medical costs?" "Have I admitted to the hospital today any patient that could have been cared for just as well in my office?"

Unless each practicing physician becomes a good and able member of the crew of that good ship "Private Enterprise," the vessel will founder in the sea of socialism which becomes more turbulent with each passing day.

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1. Asher, L. M.: The Choice of Anticholinergic Drugs in the Treatment of Functional Digestive Diseases, Amer. J. Dig. Dis. 4:260-275 (April) 1959.

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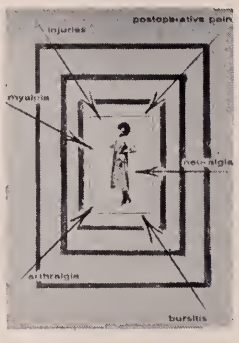
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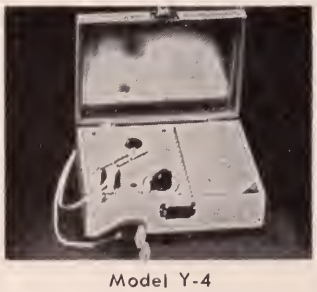
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Deaths

Dodge, Percy L., Miami; born in Kingsport, N. S., Canada, on Jan. 5, 1883; Tufts University School of Medicine, Boston, 1908; interned in mental institutions of state hospitals of Massachusetts and New York and served residencies in the Hudson River State Hospital, New York, and Boston City Hospital, Boston; practiced in Worcester State Hospital, Worcester, Mass., Kings Park State Hospital, Kings Park, N. Y., Hudson River State Hospital, Boston Psychopathic Hospital and Boston State Hospital, and served on the faculty of Tufts Medical College, before locating in Miami in 1925; engaged in the practice of neuropsychiatry there for more than 36 years; since 1942 had owned and directed the Miami Medical Center Hospital for treatment of nervous disorders; served in the United States Army with the rank of major during World War I; was a member of the American Medical Association, Southern Medical Association, Southern Psychiatric Association and New England Society of Neurology and Psychiatry, and was a fellow of the Academy-International of Medicine, died February 1, aged 80.

Gammage, Tom Rogers, Miami; born in England in 1874; Southwest School of Medicine and Hospital, 1903; interned at Bellevue Hospital Medical School, New York; came to Florida from Kansas City, Mo., in 1919, and located in Miami, where he engaged in the general practice of medicine; was the tenth Miami doctor of preboom days; wrote a book about his 60 years of medical training and practice, entitled "Starting From Scratch," which was published in 1955; was a member of the American Medical Association; died February 26, aged 88.

Spertus, Irving, Dunedin; born in Brooklyn, N. Y., on May 27, 1927; University of Geneva Medical School, 1956; interned at the Martland Medical Center, Newark, N. J., and served a resi-



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dency in internal medicine at King's County Hospital, Brooklyn; joined the Mease Clinic and Mease Hospital staff in 1961, where he practiced internal medicine, with emphasis on gastroenterology; was a member of the American Medical Association and was active in the Suncoast Heart Association; died January 11, aged 35.

Van Tilborg, Laurance Douglas, Fort Pierce; born in Cawker City, Kan., on Oct. 13, 1902; University of Pennsylvania School of Medicine, Philadelphia, 1934; served an internship at Abington Memorial Hospital, Abington, Pa., from 1934 to 1936; practiced at Elkins Park, Pa., for 13 years before locating in Florida, where he engaged in the practice of internal medicine in Fort Pierce for 12 years; was a past president of the St. Lucie-Okeechobee-Martin County Medical Society; was a director of the Florida Hospital Association for the 1960-1963 term; held membership in the American Medical Association, American Heart Association and Florida Heart Association, died Oct. 28, 1962, aged 60.

Meetings

May

"Million Dollar" Annual Meeting, Florida Medical Association, May 16-19, Diplomat Hotel, Hollywood

June

112th Annual Meeting, American Medical Association, June 16-20, Atlantic City

August

Postgraduate Obstetric-Pediatric Seminar, Thirteenth Annual, August 22-24, Daytona Riviera Motel, Daytona Beach

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1. Pomeranze, J.: Clinical Med. 8:1155, June 1961. 2. Krall, L. P. and Bradley, R. F.: Geriatrics 17:337, May 1962. 3. DeLawter, D. E. et al.: J.A.M.A. 171:1786, Nov. 28, 1959. 4. Perkin, F. S.: J.A.M.A. 173:36, May 7, 1960. 5. Pearlman, W.: Phenformin Symposium, Houston, Feb. 1959. 6. Radding, R. S. et al.: Metabolism 11:404, April 1962. 7. Gold, A. et al.: Applied Therapeutics 2:137, 1960. 8. Brown, G. D. and Gabert, H.: Applied Therapeutics 4:451, May 1962. 9. Gold, A.: Applied Therapeutics 4:466, May 1962.

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References: 1. A.M.A. Council on Drug J.A.M.A. 183:469 (Feb. 9) 1963. 2. Gruenber F.: Curr. Ther. Res. 2:1 (Jan.) 1960.

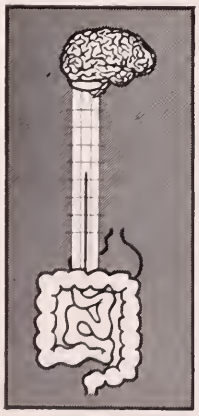
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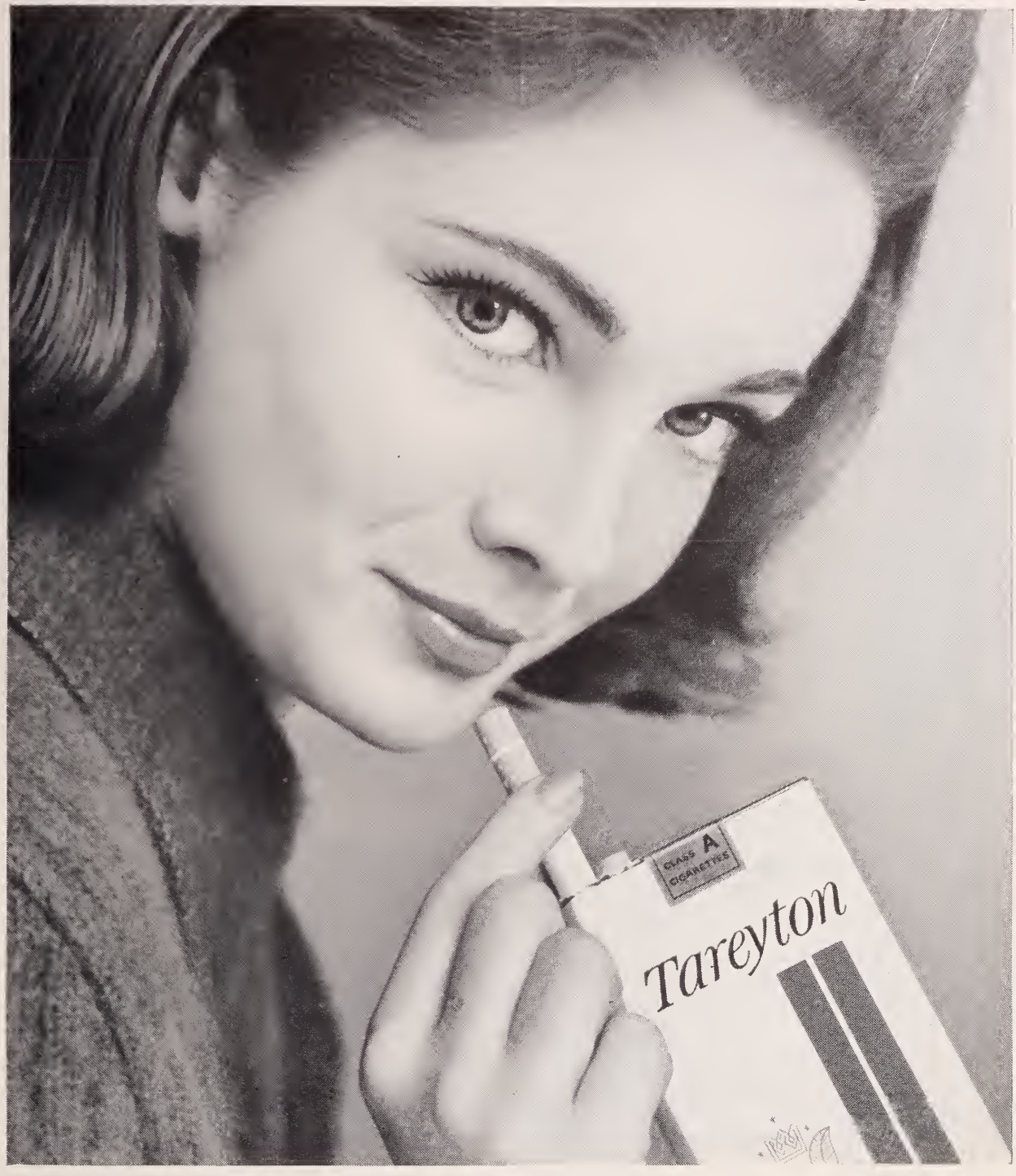
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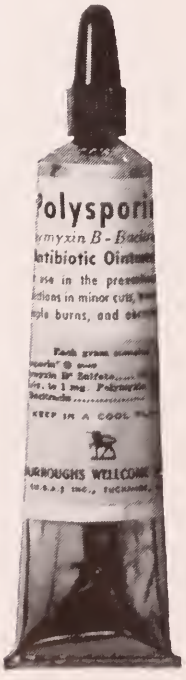
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[1] Simon, F. & Bernstein A.: "The Treatment of Obesity in Patients with Cardiovascular Disease," Angiology, *12*:32-37, Jan. 1961.
[2] Plotz, M.: Modern Management of Obesity, J.A.M.A. *170*:1513-1515 (July 25) 1959.
[3] Bernstein, A. & Simon, F.: "Treatment of Obese Diabetics and Arteriosclerotics," Clin. Med. 907-920, May 1961.



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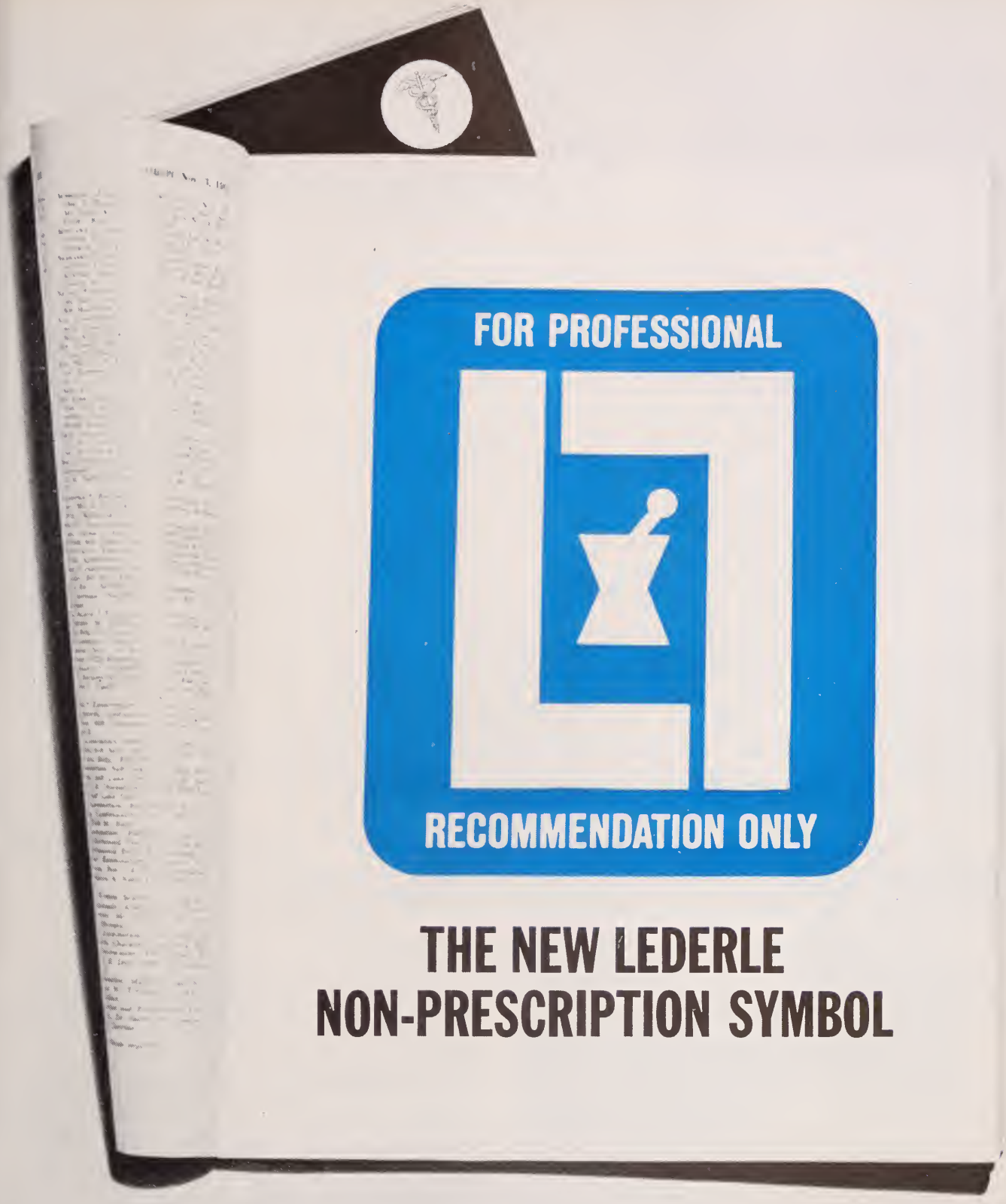
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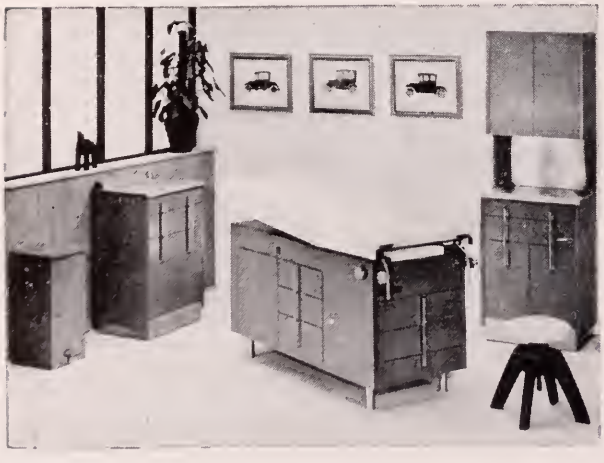
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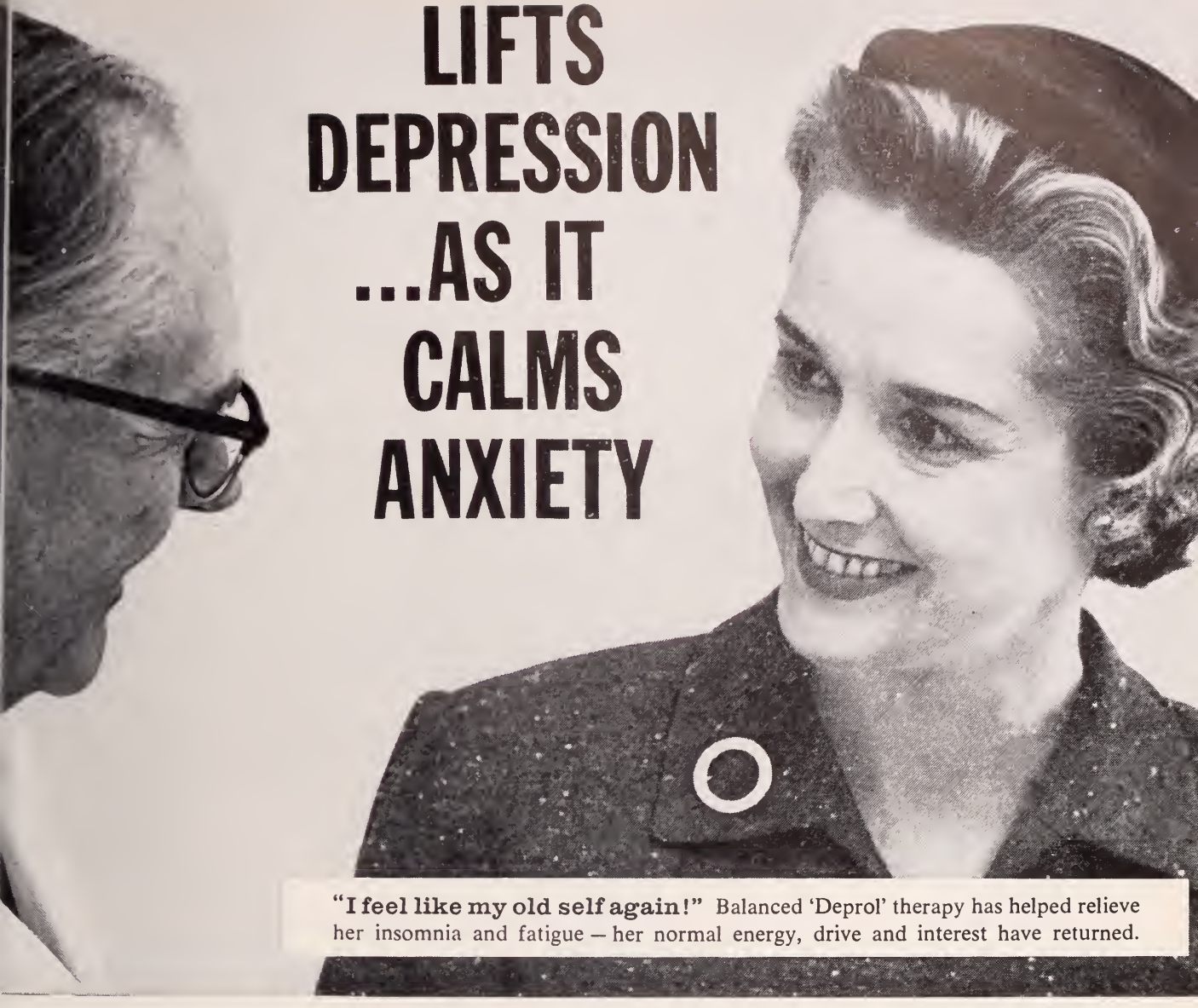
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June, 1963
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of the Florida Medical Association

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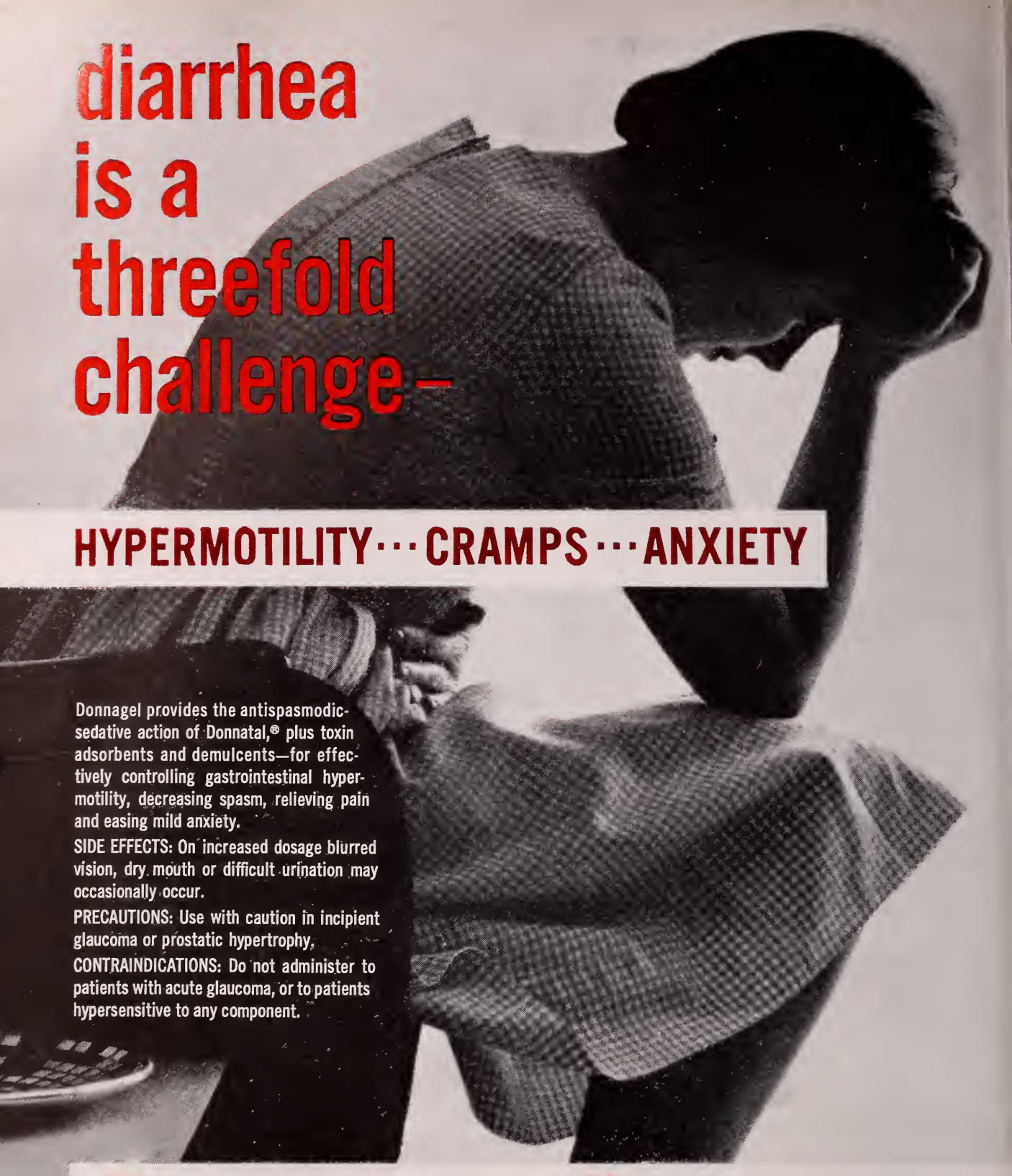
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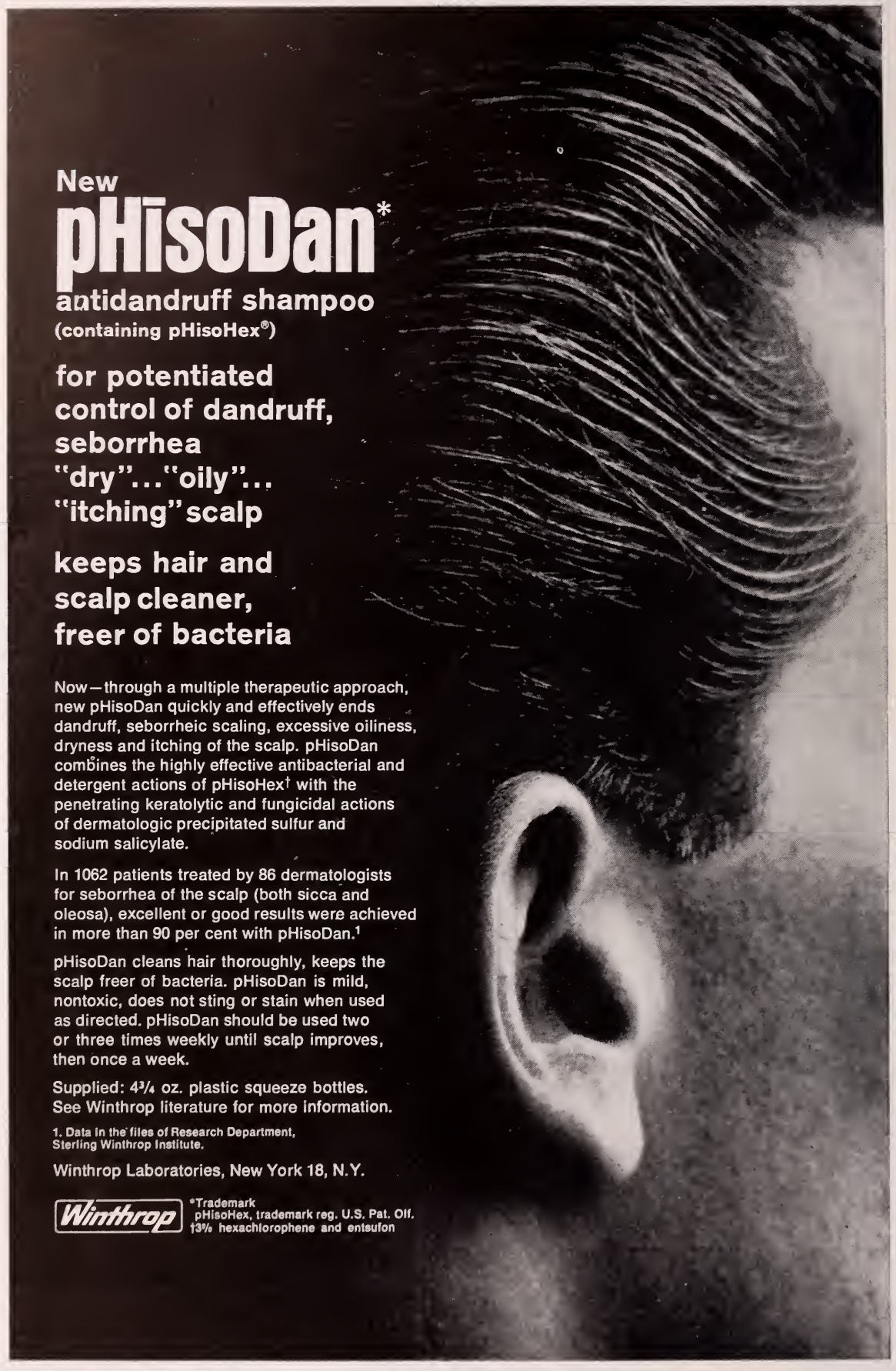
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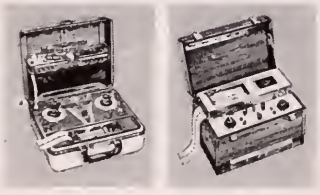




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[1] Simon, F. & Bernstein A.: "The Treatment of Obesity in Patients with Cardiovascular Disease," Angiology, *12*:32-37, Jan. 1961.
[2] Plotz, M.: Modern Management of Obesity, J.A.M.A. *170*:1513-1515 (July 25) 1959.
[3] Bernstein, A. & Simon, F.: "Treatment of Obese Diabetics and Arteriosclerotics," Clin. Med. 907-920, May 1961.

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*AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181:411-423 (August 4, 1962).

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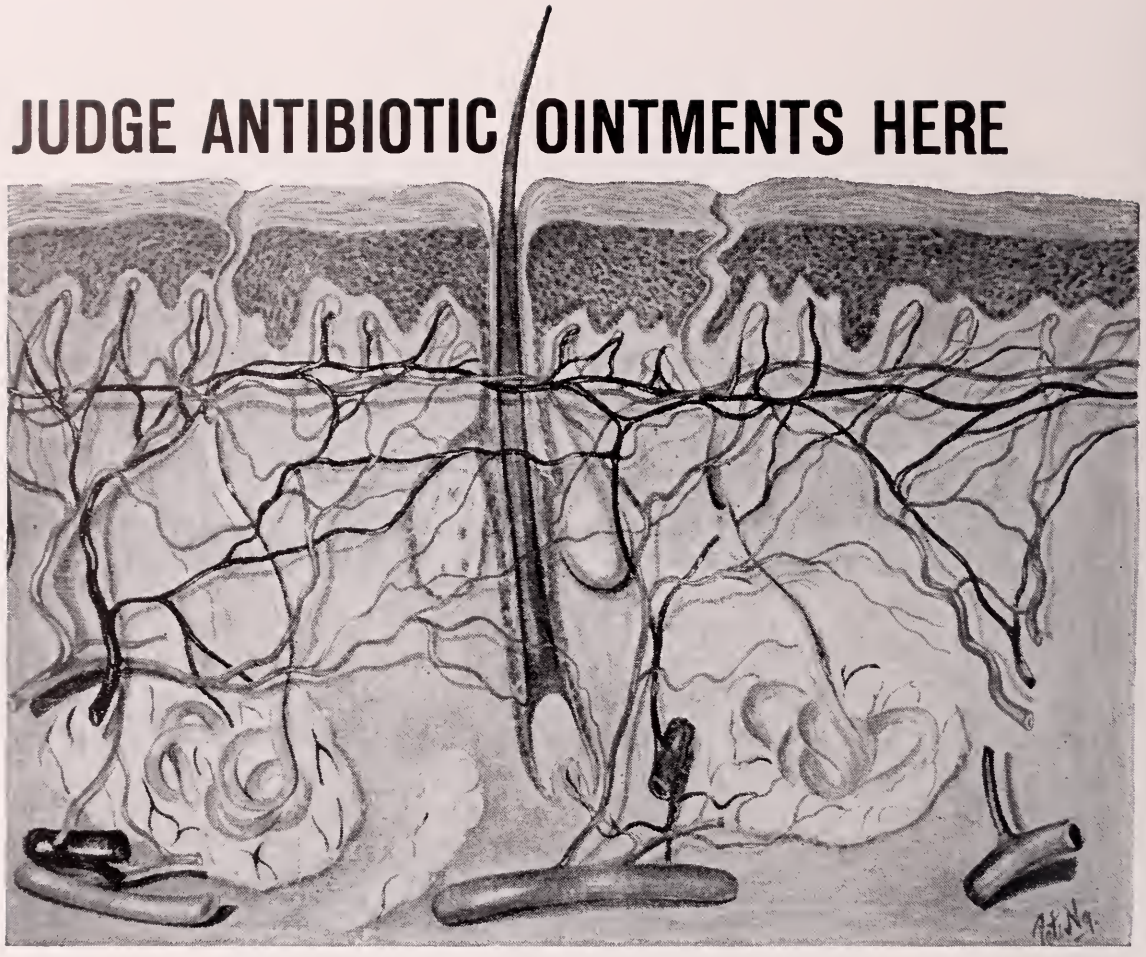
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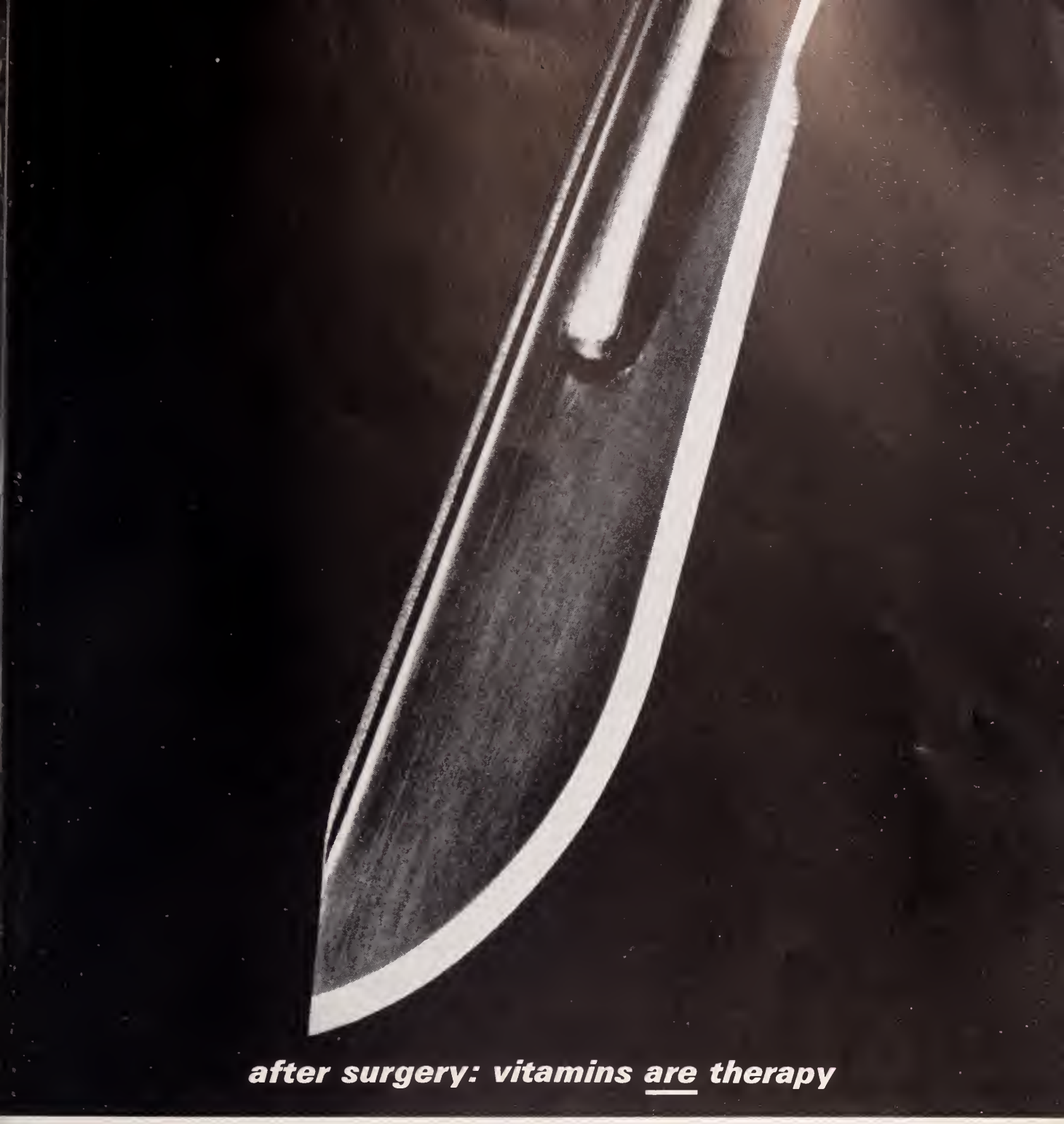


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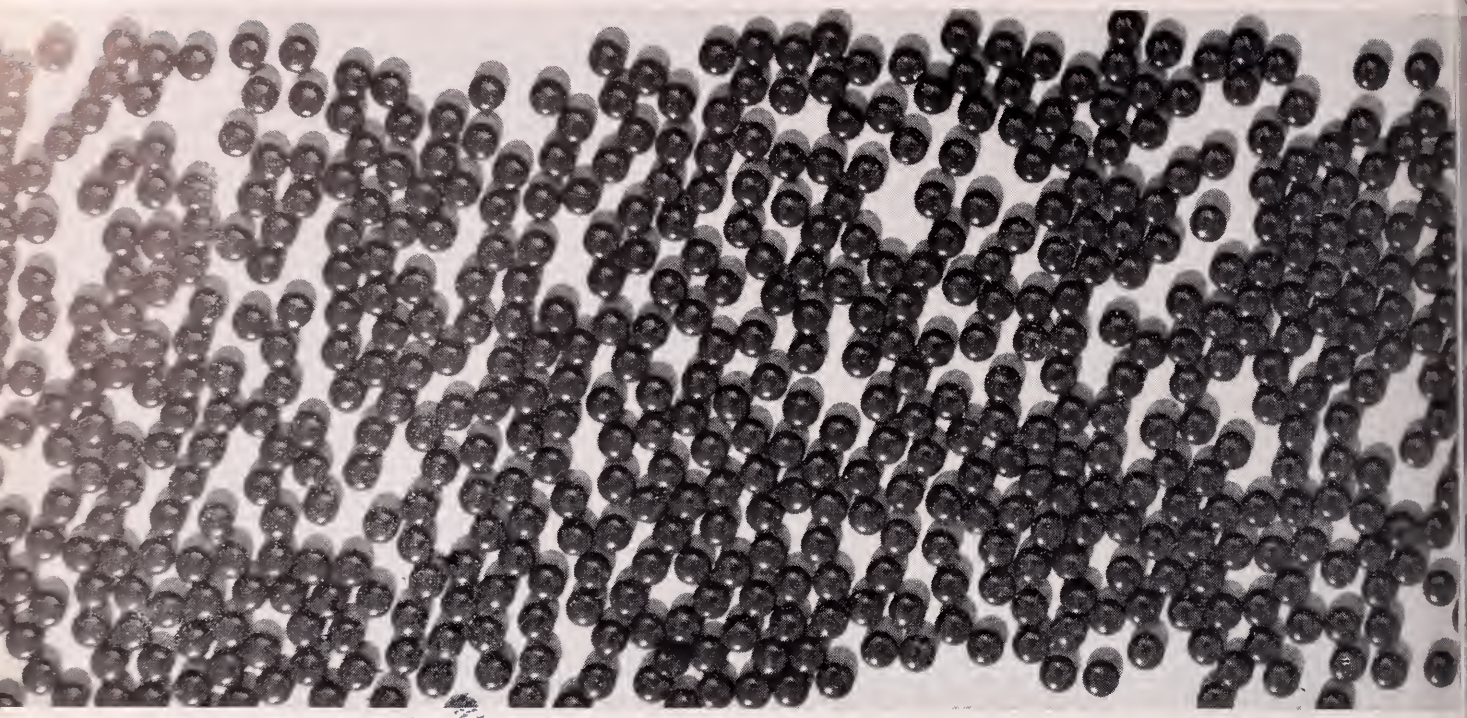
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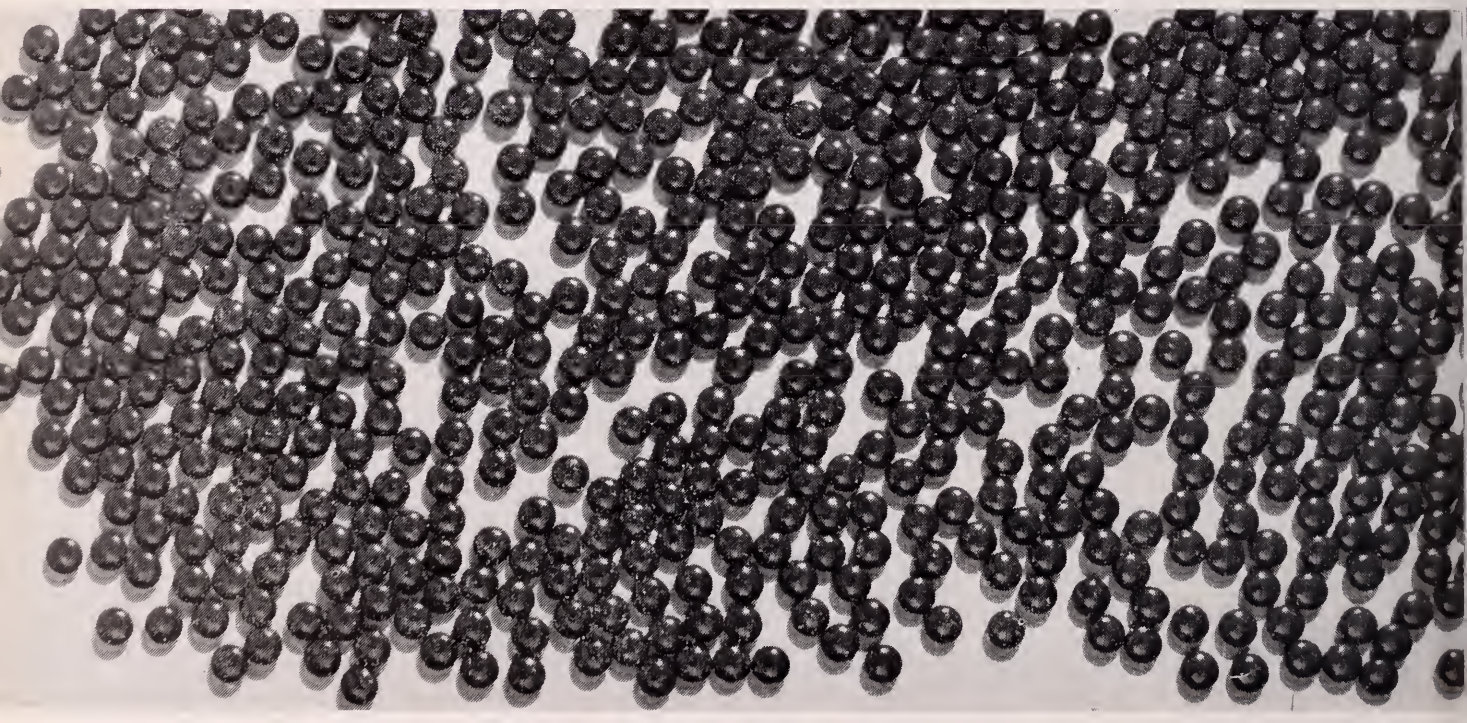
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The JOURNAL
of the Florida Medical Association

Evaluation of Venomous Snake Bite in the Southern United States From Parallel Clinical and Laboratory Investigations

Development of Treatment

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Newton C. McCollough, M.D.
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Gainesville

Four years ago one of us (N.C.M.) examined the status of the juvenile amputees under the care of the Florida Crippled Children's Commission.[1] Of the 107 children under 15 years of age, 63 per cent were congenital amputees and in 37 per cent the amputation was post-traumatic or surgical in origin. Seventeen per cent of the latter were found to be the result of the bite of venomous snakes. Even in such a small group this number seemed extremely high and worthy of further study.

Though there are other reasons for amputation or serious damage to the extremities which are much more common, it was thought that trauma of this particular etiology was worth an investigation. One of the purposes of such a study would be to determine if, in a comparatively large series of serious venomous snake bites in human beings, any common therapeutic denominators could be found which act for the benefit or to the detriment of the patient. It was hoped that by careful exclusion of all cases of negligible envenomation, that is, by consideration only of bites which had resulted in serious sloughs or amputation, these findings would assume more significance.

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Methods Clinical.—In 1959, the 3,444 doctors then in active practice in Florida were polled for patients in whom venomous snake bite had led to amputation or serious slough. Crippled children's clinics of Florida and of neighboring states, prosthetists' listings, and the list of bites collected by the Ross Allen Reptile Institute were surveyed. Thirty-six amputations were disclosed: four above the knee, 13 below the knee, three within the foot, one above the elbow, five below the elbow, three in the hand, and six of the phalanges. Seventeen sloughs, deforming and disabling injuries, were also reported.

Information was gathered, when possible, on the circumstances surrounding the bite, the clinical picture and the treatment. A fatality can be the result of some unusual contributing factor, such as juvenile sensitivity, allergic reaction, or the extraordinary intravascular injection of the venom, so that death versus survival time cannot be used to measure the effectiveness of snake bite treatment of human beings on this continent.[2]

An evaluation of individual remedies in the clinical treatment of envenomation (venomous snake poisoning) is difficult because individual measures are never applied alone and the extent of poisoning is never known. It is, therefore, im-

perative that the efficacy of therapeutic measures be established in the experimental animal.

Methods Experimental.—Preliminary work demonstrated that the heterogeneous complex of proteins which is venom could be labeled entirely by routine methods which are described in the literature.[3] Further work has shown that labeling can be done without loss of toxicity and without change in the immunologic character of the venom. In these studies, radioiodine (I^{131} and I^{125}) was used to label lightly rattlesnake venom *(Crotalus adamanteus)* for the purpose of following the distribution of the venom and determining the possibility of its removal by incision and suction after subcutaneous or intramuscular injection. Similarly, antivenin was labeled with the same radioisotopes to determine the optimal route for its administration and to study the factors which affect the neutralization of injected venom. All of this work was performed in anesthetized dogs, and the polyvalent antivenin Crotalidae* was used.[4]

Snakes

In North America all the poisonous snakes of medical consequence are members of the *Family Crotalidae* or pit vipers with the single exception of the coral snake. The rattlesnakes *(genera Crotalus and Sistrurus)* and the cottonmouth and copperhead *(genus Ancistrodon)* can be found in this first large group. They are widely distributed throughout the United States, but more numerous and active throughout the year in the southern portion. The Eastern and Western diamondback and the cottonmouth moccasin produce the most serious bites. The coral snakes, of which there are four types, are scattered through the Southern states from Florida to southern Arizona, New Mexico and Texas. They are members of the *Family Elapidae,* possess fangs and venom very different in character from those of the crotalids, produce a different envenomation syndrome, and, therefore, will be discussed separately. All of these venomous snakes have two fangs in the upper jaw and twin puncture wounds are the classical sign of their bite.

A study of the biting apparatus and behavior reveals that in the crotalid snakes there is a well developed mechanism for erecting the fangs and introducing the venom into the prey. This behavioral adaptation, the strike, is ordinarily so extremely rapid that it cannot be followed by the human eye. It consists of wide opening of the jaws, erection of the hollow fangs, and a forceful driving forward of the head, momentum usually effecting penetration of the fangs into the object which is struck. At the instant of penetration of the fangs, the muscles of the jaw which enclose the venom gland cause ejection of the venom, after which the head of the snake is withdrawn to its original position. The speed of this entire maneuver has probably been developed as a survival characteristic to prevent retaliatory seizure of the snake by its victim. Its inaccuracy is one of the principal factors which make for variation in the amount and depth of venom injected.

The venom is a heterogeneous mixture of potent biologically active materials mostly of protein nature. It should be emphasized that knowledge of the mechanisms whereby snake venom produces its lethal effect is deficient in many respects. The secretion is an elaborately developed complex which secures, kills, and partially digests the prey. In this respect, venom may be considered to be "prehensile" in nature.

The venom gland is a modified salivary gland located in the approximate position of the parotid gland, of which it is apparently a specialized type. It is equipped with tendinous and muscular attachments to the bony structures of the head and jaws which seem to facilitate the control of the amount of venom delivered by the snake. In a series of bites performed under controlled conditions, by Eastern and Western diamondback rattlesnakes and the cottonmouth moccasin, it was determined that the snakes are able to vary the amount of the venom they inject. Snakes which possessed fangs long enough to deliver the venom at the intramuscular level most often did not do so.[5,6]

General Considerations

Classical twin puncture wounds inflicted by a large venomous snake do not necessarily mean a critical situation will evolve. It is the amount and toxicity of venom, and the depth and location of injection which determine this. Unfortunately, all of this important information, except the location of the bite, is lacking in every clinical situation. These are the factors, however, which produce the gradations in severity of the manifestations of venomous snake bite, and the physician must remember to confine the most radical therapy to the most serious presentation of symptoms.

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In a recent study of 121 cases of venomous snake bites in North Carolina, Merriam[7] noted a disturbing lack of uniformity in methods of treatment. It should be recalled that home remedies of the early settlers of the West, such as placing the cut surface of a freshly split chicken against the bite wound and actual and chemical cautery of it, worked marvelous cures of the bites of nonpoisonous snakes and the bites of poisonous snakes which injected little or no venom. Serious consequences occur only when such therapeutic measures are challenged by the injection of considerable quantities of venom by the snake.

In this series several factors were found to be prognostic of a serious situation: 1. The size of the snake. 2. The species. 3. The length of time the fangs remain in the victim. 4. Multiple bites, commonly seen in children. 5. The age of the victim. Bites in children are usually grave. 6. The proximity to the trunk of the location of the bites, 98 per cent of which occur on the extremities. 7. The character and amount of clothing between the snake and the skin. In none of the 53 serious bites reported here was any leather present between the fangs and the skin, and clothing was present only in eight.

Symptoms.—Wood, Hoback and Green[8] graded the subjective, objective and local constitutional reactions to venomous bites of the copperhead and timber rattler into three classes of severity. Parrish[9] added a zero classification to describe the innocuous bite of a known poisonous snake (no envenomation). These grades are so well defined that they may offer the practitioner a yardstick for use as a therapeutic guide. Some further distinction must be made because the symptoms of Grade III described by Wood and his associates[8] do not approach the severity of those due to the bite of the Eastern and Western diamondback rattlesnakes. Grade IV has, therefore, been added to this classification. The classification follows:

Grade I, Minimal.—Cases in which puncture wounds (fang marks) are present with minimal or no local swelling. Moderate pain may be present without systemic involvement.

Grade II, Moderate.—In this group, the signs of Grade I poisoning progress rapidly to more severe and widely distributed edema and pain. Petechiae and ecchymoses may be present locally. Weakness, nausea and vomiting may occur. Klauber[10] described a constant bloody ooze from the fang marks due to the anticoagulant properties of crotalid venoms. This may continue for days and has been observed by us.

Grade III, Severe.—In severe envenomation, the signs of Grades I and II mingle in rapid progression with immediately evidenced systemic signs and symptoms.

Grade IV, Very Severe.—The venom of the large rattlesnakes *(C. adamanteus, C. atrox,* and *C. horridus)* will usually produce sudden pain and rapid local swelling which spreads proximally and may involve the ipsilateral trunk. Both local pain and edema may be absent if the injection is intravascular. Ecchymoses and progressive edema due to extravasation of blood and accumulation of lymph will rapidly follow. Subcutaneous tensions lead to bleb formation and spontaneous rupture of the skin can occur.[11] Where fascial planes are tightly restrictive at the wrist or ankle, hand or foot, tension may become sufficiently great to obstruct venous or even arterial flow. In addition to localized destruction of tissue contacted by the venom, gangrene due to ischemia may occur distal to the bite. These areas of necrosis may rapidly be invaded by bacteria and the clinical signs of infection may complicate the local and systemic picture.

Early constitutional symptoms of weakness, vertigo, numbness and fasciculation, painful muscular cramping, and tingling about the face and head, particularly the lips, have been described. Yellow vision and blindness may also occur due to retinal hemorrhages.[12] The signs of shock may be apparent within a few minutes, pallor, sweating, cold and clammy skin, rapid thready pulse, or even the absence of peripheral pulses. Nausea and vomiting often appear in the first 10 to 15 minutes with incontinence of urine and feces. Frank blood or blood-tinged excretions may exude from all body orifices. The action of the venom may lead to kidney shutdown and hepatic and cardiovascular damage. Convulsions are not uncommon, particularly in children. Coma and death may ensue within 30 minutes of the bite. Variability of the clinical picture from person to person or even from bite to bite in the same person[13] may permit "hemorrhagic" or local factors to be more prominent in one instance and "neurotoxic" in another bite by the same species of snake.[14]

Treatment

Immobilization—Body Rest. — Inactivation of the patient and immobilization of the limb are

desirable insofar as they restrict the spread of venom systemically. Splinting of the bitten extremity can inhibit the local diffusion of venom by stopping the excursion of tendons and muscle bellies within their respective sheaths. In not a single case of this series was any immobilization placed in effect until hospitalization unless it was by virtue of the fact that the patient became unconscious and was carried. With these few exceptions, histories indicated normal or excessive mobilization to gain early hospitalization. In five cases in which there was moderate to extreme activity after the bite, the patients were in deep shock on admission to the emergency room in as short a time as 30 minutes.

Tourniquet.—In early America, both Indians and colonists applied the tourniquet as a means to delay venom absorption. Its use historically is intimately linked with incision and suction. The degree of occlusiveness is of primary consideration. If the tourniquet is tight enough to occlude arterial flow, very little damage may occur above it; however, the venom of some snakes, particularly that of the Eastern diamondback rattlesnake, if locked within an extremity in such a fashion for any period of time, may well damage the tissue severely by virtue of its powerful necrotic properties. In addition, high concentrations of venom and other lethal factors may suddenly be released into the blood stream when a completely occlusive tourniquet is removed. Willson[11] reported a death in such an instance. All such toxins may not be neutralized by the antivenin.

Since it is generally conceded that venom travels proximally by way of lymphatics and by diffusion, tourniquet tension does not have to be great to impede it. Its use to obstruct superficial venous and lymphatic flow for a 30 to 60 minute period during incision and suction seems reasonable.

A completely occlusive tourniquet may be justified when no medical treatment can be foreseen for hours or in a lower extremity bite in which the signs of severe envenomation have already appeared and when active effort on the part of the patient is required to reach a hospital. In all such situations, the tourniquet should be used with the knowledge that the extremity is being exposed to sacrifice to save the patient. There seems to be no doubt, especially if the spread of the venom has been restricted, that amputation in a serious bite will effect immediate improvement of symptoms. The removal of the tourniquet, if amputation is not elected, must be preceded by administration of large amounts of antivenin intravenously and executed with extreme caution.

Removal of the Venom by Incision and Suction.—It appears that clinical analysis of snake bites in human beings cannot render a decision on the value of incision and suction, no matter how large the series reported, because of the variables involved, that is, the amount of venom injected and the depth to which it is deposited by the snake. A statement concerning the effectiveness of incision and suction, with or without tourniquet, must come from experimental bites. Jackson and Harrison,[15] using envenomated dogs, demonstrated that the serosanguineous exudate withdrawn by incision and suction not only was toxic, but, since it was neutralized by antivenin, was also venomous. More recently Russell and Emery[16] performed pharmacological studies on the effects of the serosanguineous exudate and confirmed that the material removed is qualitatively similar to the venom injected. Although they emphasized that treatment of snake bite by incision and suction is inferior to the use of antivenin, Ya and Perry[17] and Ya, Guzman and Perry[18] also attested to the fact that the use of this measure increases survival in envenomated dogs.

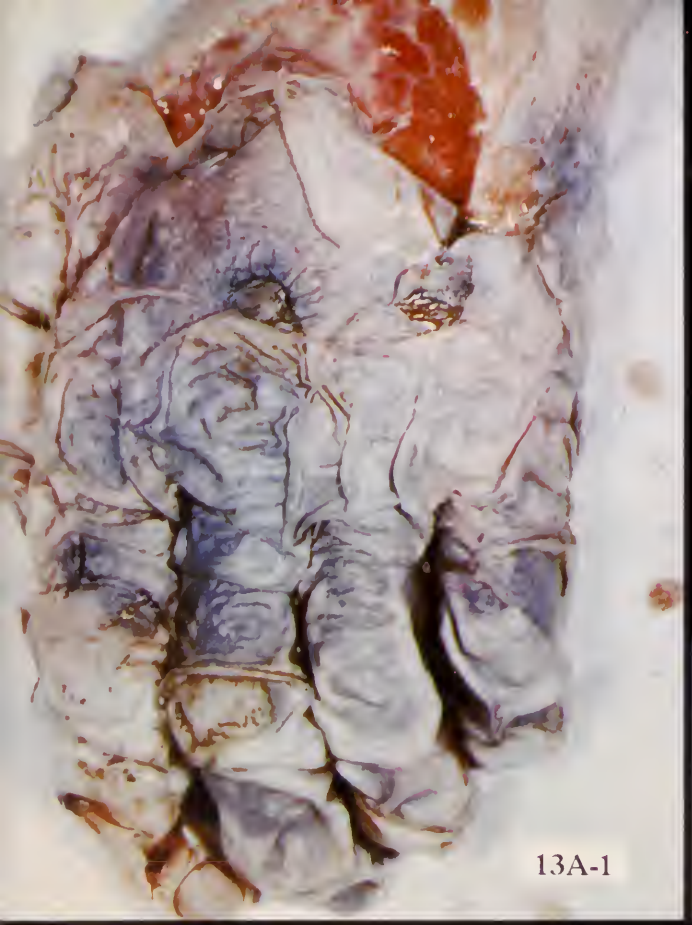
Opposite Page

13A1. — This 15 year old white male, weighing 125 pounds, was bitten by a 2 foot cottonmouth moccasin. The fang marks and crosshatch incisions over them can be identified with difficulty over the dorsum of the base of the right index finger. Edema extended to the right chest wall from two and a half to 12 hours post-bite. Seven units of antivenin were administered intramuscularly. The hand was immersed in ice in excess of 48 hours. This was the appearance of the hand three weeks post-bite.

13A2. — After debridement of necrotic tissue and the appearance of early granulation tissue over the stumps of the metacarpals two months post-bite.

22A1. — A 22 year old white male was bitten in the web of the right thumb (only one fang was inserted) by a 5 foot rattlesnake he was handling. On admission to the hospital 30 minutes later he was in shock, was incontinent, vomiting blood, and complained of severe visual deficiency. This photograph displays at 24 hours the marked edema, and ecchymosis extending into the chest wall. Cooling was applied with ice to the axilla for two hours, moved distally to the hand, and was discontinued 48 hours post-bite. Three units of antivenin were administered intramuscularly immediately and three units some hours later. Anuria was present on the second day; the blood urea nitrogen level was 36 mg. per hundred cubic centimeters.

22A2. — The hand appeared to be gangrenous in 72 hours. This plate shows the hand at about the fifteenth day when the appearance of a definite line of demarcation was followed by midforearm amputation.



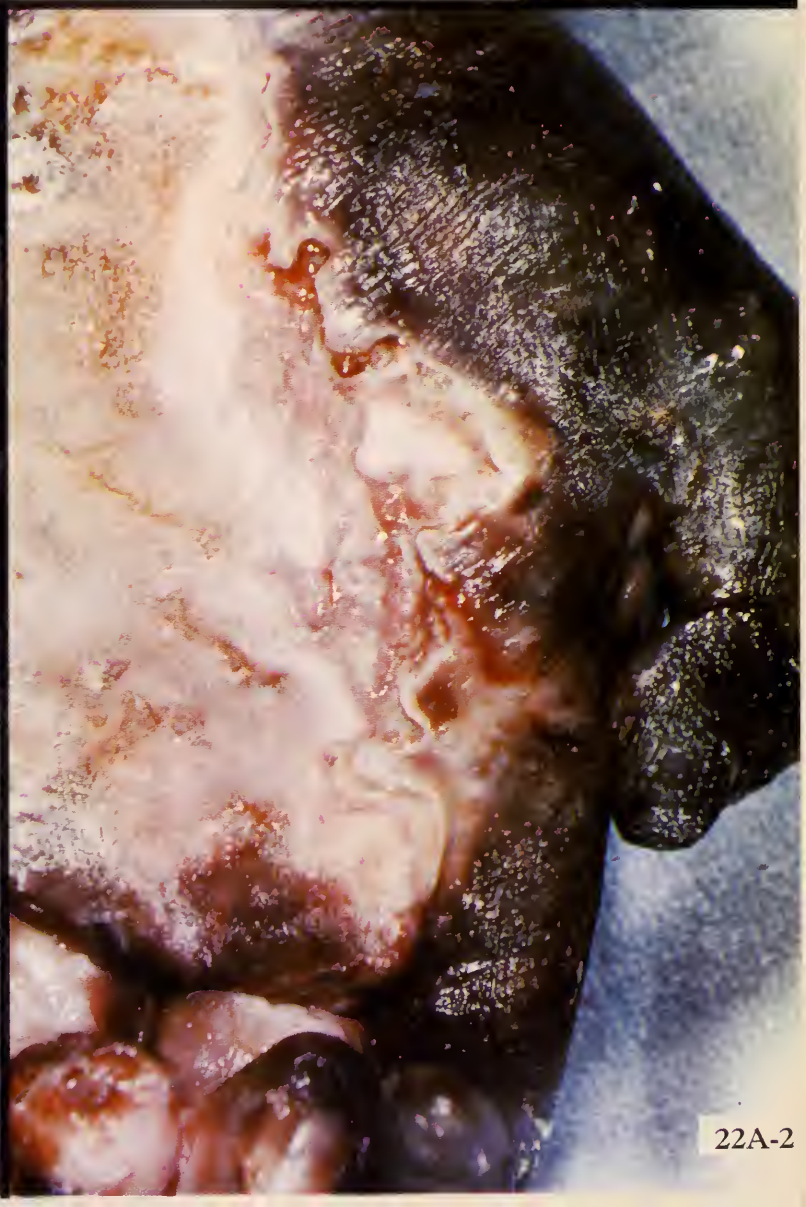
13A-1



13A-2



22A-1



22A-2


18S-1


18S-2


18S-3


18S-4

The work of Leopold and Merriam[19] in which a bioassay in mice was used as a means of determining the amount of venom removable by suction after incision showed that relatively large amounts of toxin neutralizable with antivenin are removed this way. Merriam[7,19,20] estimated the amount removable to be 22 to 44 per cent of the dose. This estimate is in close agreement with studies in our laboratory utilizing rattlesnake venom labeled with I^{125} and I^{131}. Amounts up to more than 50 per cent of subcutaneously injected venom were removable when the suction was started within three minutes after the injection. As in Merriam's work, much less I-labeled venom was available from intramuscular sites of injection when the incision reached only subcutaneous depths. With deeper injection the amount of venom recovered was extremely variable though it sometimes reached 20 per cent of the dose. It should not be inferred that deeper incisions would be of more value. Such would probably permit more rapid dissemination of the venom.

There is almost complete agreement in the statements made by Merriam[7,19,20] and Russell and Emery[16] and the work of one of us (J.F.G.) that removal of the toxic material occurs primarily during the first 15 to 30 minutes of suction and that little venom is available thereafter. It appears certain that longer periods of suction are to no avail. No significant amounts of venom were retrieved from suction at other than the site of the bite, and therefore, incision of the extremity

Case Report

A white male, age 12, weight 80 pounds, was hunting reptiles after school on April 15, 1963. At 5:30 p.m. he discovered a snake in a hole and while probing it with a stick was bitten on the palm of the left hand. He only visualized the snake in part, but felt sure it was a large rattler. An Eastern diamondback rattlesnake six feet long was killed in the immediate vicinity the next day.

After "blacking out" for a moment or two, he felt ill and suffered severe pain in his hand. With the aid of a companion, a tight shoestring tourniquet was applied. Exertion was limited, and he was carried to the Orlando Air Force Base Hospital 15 minutes later where two distinct, freely bleeding puncture wounds were noted on the left midpalmar surface and two minor abrasions on the dorsum. The patient was pale, responsive and complaining of pain in his hand. Small superficial incisions were made to enlarge each fang mark; a lightly occlusive tourniquet was applied and suction instituted. Ice bags were placed about the hand and removed 35 minutes later. Tetanus booster was administered; and intradermal horse serum was read as negative. One hour post-bite, the first unit of polyvalent crotalid antivenin was injected subcutaneously into the bitten forearm, and the second, one and one-half hours post-bite, was infiltrated along the line of advancing edema which had extended above the wrist. The hematocrit level was 37 per cent, pallor was intensified, and the patient became semistuporous. Altered and red blood was vomited repeatedly. Intravenous dextrose was instituted.

Lethargy deepened, and two hours post-bite swelling had reached the elbow. The palm was blue and distended; the left radial pulse was not palpable. Blood pressure was 86/40 mm. Hg and the pulse rate 120. The third and fourth and fifth units of antivenin were given intramuscularly into the bitten upper arm.

Two and one-half hours post-bite the patient appeared to be very toxic. The edema had progressed to the deltoid area, and the patient was given his sixth unit of antivenin in the opposite deltoid muscle.

Four and one-half hours post-bite, the swelling had extended into the axilla and to the anterior and lateral chest wall. The entire area had the bluish tint of subcutaneous hemorrhage, and the finger tips were blue and hard, but pressure showed capillary refilling. The entire extremity was cold and no pulses were palpable. The fingers were immobile and anesthetic. Fasciotomy was considered. Blood pressure was 80/40 mm. Hg and the pulse rate 120 to 140. Reactions were lethargic, but responsive. Because the patient's local and systemic clinical picture was one of deterioration, 12 units of antivenin were administered intravenously in normal saline solution during the next hour and 15 minutes. This was the final dose of antivenin, the total being 18 units. No further extension of the edema occurred, and rapid recovery from the poor systemic reaction was observed. One unit of blood was given.

Fourteen hours post-bite, the general appearance had markedly improved. The fingers were pink, and limited flexion and extension of the interphalangeal joints was present. Oral fluids and soft diet were permitted.

The hematocrit level did not drop below 30 per cent; the blood urea nitrogen and all other laboratory findings, including electrolyte balance, were normal except for moderate elevation of the white blood cell count. An electrocardiogram on admission showed nonspecific T-wave changes. Antibiotic coverage had been maintained. Oral temperature curved from 102 F. on the third hospital day to normal on the fifth. On the seventh day, generalized moderate urticaria was controlled by antihistamine drugs and terminated in two days. Fluid intake and urinary output were consistently satisfactory. The patient was ambulatory on the fifth day.

The patient's general clinical status on May 3, three weeks post-bite, is excellent. There is marked loss of sensation over the ulnar side of the hand. Full thickness loss of skin is suspected over the palm, one inch in diameter and to a lesser extent over the dorsum. Motion is improving in the hand, wrist and elbow.

The Journal of the Florida Medical Association is indebted to the Orlando Air Force Base Hospital for the privilege of reporting this well managed and instructive case of snake bite.

Opposite Page

18S1. — The hand on April 16, the second day. Note the distance between fang marks and the characteristic serosanguineous seepage.

18S2. — On April 18, the third day, marked bleb formation.

18S3. — On April 19, the fourth day after decompression of the blebs, edema of the forearm diminishing.

18S4. — On April 22, satisfactory digital circulation, edema still marked but diminishing.

proximal to this point for this purpose seems useless. There has been some criticism of incision and suction technique on the grounds that the enthusiastic first-aider, especially in the treatment of bites of the fingers or the dorsum of the hand or foot, might well cause damage to underlying tendons and ligaments. In all these experiments the effective incisions were made I-shape or X-shape through the sites of injection of venom. In no instance did they penetrate the primary muscle fascia, being the sort of superficial incision one makes by raising the skin with a pinch between two fingers.

Incision and suction are an effective means of snake bite first aid treatment. It should not be exclusively relied upon. It should be performed as soon as possible after the bite has occurred without waiting for signs of envenomation such as immediate swelling, pain, or systemic symptoms. As described, it is a relatively harmless procedure.

In dogs, multiple incisions following the line of proximal advancing edema have not yielded for one of us (J.F.G.) tagged venom on suction, but under hospital conditions in human bites they may reduce subcutaneous tensions by drainage. Intense edema about the wrist or hand, ankle or foot may require relaxation incisions (fasciotomies) in order to maintain their circulation.

Surgical Removal of the Venom.—Isolated instances of digital amputation have been reported to be beneficial. Willson[11] stated that the deep insertion of fangs of a large rattlesnake or cottonmouth moccasin into a digit, producing immediate pain and swelling, could certainly result in severe loss of function of the digit if not the hand and immediate amputation of the digit might be considered. This is particularly applicable when it can be foreseen that transportation to a physician will be long delayed.

Allen[21,22] and Parrish[23] found some evidence in "experimental bites," using Western diamondback venom, to support the value of wide excision as a means of treatment if performed within 30 to 60 minutes of the time of the bite. They gave these measures their qualified approval. In the experience of Hutchinson,[6] most bites in humans are only to subcutaneous depths and early excision, within one hour, superficial to the deep fascia appeared to him to be of value in five cases of Eastern diamondback rattlesnake *(C. adamanteus)* envenomation.

Within our laboratory, however, experiments involving the injection of crotalid venoms subcutaneously and intramuscularly into the lateral thigh of dogs have shown involvement of underlying muscles from knee to hip within one hour. Under these circumstances, we believe excision, to be effective, would have to be very extensive. Obviously, further studies, clinical and experimental, must be made to clarify the value of excision as a method of treatment.

Cryotherapy.—Stahnke,[24-26] in 1953, popularized the "L-C" (ligature-cryotherapy) management of venomous snake bite, a treatment which is based on the postulate that icing the bitten extremity will inhibit the local action of the venom and permit its neutralization by the natural defense mechanisms of the body.

In this work, he indicated that the time required for neutralization of the venom by tissues of the body should be estimated, for pit vipers, by the size of the attacking animal, and at least six hours might be considered a minimum. It is his estimate that the bite of a large rattlesnake might require ice treatment for as much as a day. In lieu of ice in the field, he recommended the use of ethyl chloride spray, just to the point of frost formation so as not to freeze the deeper tissue.

The extent of animal experimentation and clinical observations to support Stahnke's contentions that incision and suction and antivenin are inferior to ligature and cryotherapy as methods of snake bite treatment is meager and inconclusive in the main, consisting of observations of experimental envenomation of three cats and seven clinical bites.[24]

Allen[22] in his work in 1939, observed little change in the tissue of dogs in which venom had been injected while refrigeration continued for as long as 48 hours; however, following the warm-up period, massive and rapid necrosis occurred. He concluded that though refrigeration markedly reduced the action of the venom locally, it did not inhibit greatly the spread of the proteolytic enzymes and subsequent removal of ice resulted in damage more extensive than would have initially occurred.

Andrews and Pollard[27] recommended cooling or refrigeration in 1953. Recently, in a personal communication, Andrews[28] stated that cold is primarily used to relieve pain and should be used locally for a period not exceeding 30 minutes.

Ya and Perry,[17] after using cryotherapy in dogs given experimental injections of lethal doses

of rattlesnake venoms, concluded that such a measure is of no value and that it results in greater tissue damage locally than in the untreated animals. The results of an experimental study by Emery and Russell[12] inclined them to the same inference. Wood,[29] after reviewing Stahnke's case for treatment of snake bite by ligature and cryotherapy, said that "it should be rejected in toto." Shannon,[30,31] after a thorough review of the L-C treatment, concurred.

Without the knowledge of these experimental facts, but with favorable publicity in news and sports publications, the rationale of cryotherapy seemed logical, and many physicians, to whom patients were brought in near collapse only 15 to 30 minutes after the bite, justifiably adopted such means of treatment. Further, the general tenor of that idea fell in line with the therapeutic teaching of that day which recommended the reduction of toxemia from a gangrenous infected extremity by refrigeration.

The experimental condemnation of cryotherapy was sustained in the clinical analysis of its use as reported in 27 cases, or 75 per cent of those which came to amputation in this series. Of these 27, refrigeration was utilized in excess of 12 hours in 23. The longest period of ice immersion was three weeks.

Clinically, not only does cold appear to be valueless, but the combination in some instances of refrigeration and venom would seem to have contributed more to the necessity of amputation than would the venom alone. The marked vasoconstriction effected by cooling or refrigeration has additional deleterious effects in that it prevents antivenin in the blood stream from freely entering the bite area. This action was confirmed experimentally when markedly reduced amounts of radioiodine-labeled antiserum were collected at the sites of envenomation in the refrigerated hind limbs of dogs in which rattlesnake venom had been injected.

ACTH or Steroid Therapy.—It was inevitable that attempts would be made to treat the inflammatory aspects of envenomation with corticotropin and adrenal corticosteroids in cases of reptile envenomation. Many such successful treatments have been attributed exclusively to the use of these nonspecific agents even when they were not used alone and the degree of envenomation was unknown. Wood, Hoback and Green[8] showed that when bite cases are carefully screened, they do not appear to be generally of value as ancillary therapy.

One of the most extensive experimental investigations of this type was conducted by Schöttler,[32] who studied the therapeutic possibilities of ACTH, cortisone, hydrocortisone, and procaine in the treatment of envenomation in great numbers of animals injected simultaneously or subsequently with venom. A statistical analysis of his results provides no evidence of a beneficial effect of such therapy. Russell and Emery[33] concurred in this analysis from their observations obtained in the laboratory experiments dealing with the venom of the copperhead and the Eastern diamondback rattlesnake *(C. adamanteus)*. They also made the significant point that the corticosteroid neither affects absolute survival nor prevents tissue damage and inflammation in the steroid-treated animals, the fundamental reason for its use.

It has been demonstrated in studies using I^{131}-labeled antivenin in conjunction with corticosteroid therapy in experimentally envenomated animals that much less labeled antibody was localized at the site of venom injection in steroid-treated animals than was localized when no steroid was given before or in conjunction with the antivenin.

Antivenin.—The first contemporary crotalid antivenin was an equine serum preparation, antiserum produced in response to the injection of 12 venoms. Perhaps because the antibody response to such a diversity of protein was diluted, its effectiveness left a good deal to be desired.[34] A new polyvalent preparation, each milliliter of which is able to neutralize 1.75 mg. of Eastern diamondback rattlesnake venom, was described by Criley[34] in 1956. This preparation, which is produced from the venom of four of the most dangerous pit vipers of North and South America, has been shown to be much more effective in the treatment of both the lethal factors and the local necrosis produced by the envenomation of all the Crotalidae in the United States. Recent experimental and clinical evaluation by authorities in this field, such as Ya and Perry,[17] Russell,[35] and Ruggiero,[36] has emphasized that the antivenin is the most effective single means of dealing with serious snake bite and should be regarded as the keystone of treatment.

In diseases which are accompanied by a great deal of local or systemic tissue destruction such as gas gangrene or tetanus infection, the toxic materials which produce the damage are pro-

liferated gradually as the infection progresses. In venomous snake bite, the situation is exactly reversed. The concentration of tissue-destroying material and toxins is introduced initially in a single massive dose and great damage can follow forthwith. It is for this reason that prompt intravenous injection of antivenin is justified in serious snake bite. Administration of the antiserum in this manner produces the most rapid neutralization, not only of the lethal effects of the venom, but also of the locally digestive principles. The amount of antivenin available to neutralize the venom at the site of the bite in two hours was determined in dogs. These animals were injected in the leg with 100 mg. of Eastern diamondback rattlesnake venom *(C. adamanteus)*, a lethal dose, and treated one hour after the venom injection with antivenin labeled with radioiodine. Eighty-four and nine-tenths per cent of the dose of antivenin administered intravenously could be recovered in the envenomated leg two hours following the injection of the antiserum. Intramuscular or subscapular administration resulted in concentrations of only 1.43 per cent and 5.6 per cent of the dose in the envenomated leg, respectively, in the same two hour period.

A person subjected to large doses of Eastern diamondback rattlesnake venom is in a state of shock. This is undoubtedly one of the main factors in the low level of absorption of antivenin from the intramuscular or subscapular sites. In such instances of severe envenomation, if no sensitivity is demonstrated, the intravenous administration in normal saline solution of doses large enough to alter, substantially, the unfavorable clinical picture is required. This may necessitate the use of 6 to 40 ampules in a severe bite. In children, whether because of the increased toxin-to-body-weight ratio, or because of an increased sensitivity to the venom, more antivenin may be required. Proper dosage can be estimated by observing improvement in the clinical signs and symptoms.

In 1961, Borden and his co-workers[37] demonstrated experimentally in dogs that it is possible to treat envenomation by an isolation and perfusion technique in which the large artery and vein proximal to the bite area (which almost always occurs in an extremity) are exposed, ligated, and cannulated. Even a short treatment of dogs injected with 3 M.L.D. (minimum lethal dose) of rattlesnake venom resulted in a prompt restriction of edema and local hemorrhage. The real value of such treatment lies in the isolation of the portion of the body treated with a foreign protein antiserum.

The injection of antivenin locally around the bite is inadvisable. In this region, massive edema usually occurs due to the destruction of capillaries and even the walls of major blood vessels. The collected body fluids and blood cells provide a very poor medium for the absorption of antivenin and the subfascial tensions created by this edema are only increased by its injection. The intensification of the ischemia which such treatment produces can develop into critical situations in the hand or foot or about the wrist or ankle where tissue anoxia may become so great as to impair motor and sensory function permanently. For these reasons, antivenin should never be injected in the fingers or toes.

Supportive Therapy. — Typing and cross-matching for transfusion is important immediately. The action of the venom and its by-products on the circulating blood may make these measures extremely difficult later. Blood may be required in amounts sufficient to counteract severe shock and/or a rapidly dropping hematocrit level. Maintenance of cardiac and renal function and normal electrolyte balance requires surveillance and appropriate therapy.

Summary

The symptoms and the gravity of the bite of the venomous snakes of the United States and Canada are due to the location of the bite, the toxicity of the venom of the species, the individual variables of venom toxicity of the particular species, the amount of venom injected and the depth to which it is injected. The size of the crotalid can play an important part in the last two factors as a large snake can deliver more venom and, by virtue of increased length of fang and muscular power, to a greater depth. The matter of length does not apply, apparently, to the degree of gravity of the coral snake bites.

Treatment must be in accord with the prognostic signs and the symptoms of envenomation and the circumstances governing the rapidity with which a patient can be placed under medical care. 1. Systemic immobilization is gained by complete body rest and locally is obtained by splinting. 2. A lightly occlusive tourniquet may facilitate the removal of significant amounts of venom during a 30 to 60 minute period of incision and suction. 3. Cryotherapy, the packing or immersion of an

extremity in ice, has no place in the treatment of snake bite unless amputation at or slightly above the tourniquet level is anticipated. Ice over the site of the bite would seem permissible for the relief of pain only. It must be remembered that cooling reduces access of the antivenin to the bite area. 4. Antivenin is the keystone to the therapy of snake bite. Because of its foreign protein nature, careful evaluation of the patient's sensitivity and the bite severity should be made before its use.

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Coral Snake Bites in the United States

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Coral snakes indigenous to the United States are of two genera, *Micrurus micruroides* and *Micrurus fulvius,* of which the latter has four subspecies, and these constitute the only elapid snakes in North America. The four vary little, if at all, in appearance. The forepart of the head is jet black and a wide yellow band encircles it behind, with a wide black ring at the neck. Alternate yellow, black, and red bands proceed in regular order to the tail. The red and black bands are wide, while the yellow bands which separate them are narrow, and these markings can be seen on the ventral as well as on the dorsal portion of the snake. The contour of the body is slender in comparison to length, and the head is bullet-shaped, widening not at all in relation to the neck. On close examination, it can be seen that these snakes possess small fixed (pin-point) fangs in the front of the upper jaw which are partially concealed by sheaths of mucous membrane. Unlike the members of the Family Crotalidae, the coral snakes have a small, round, black eye with no obvious "cat-eye" pupil.

They deserve special mention in medical literature because they have little in common with the crotalid snakes, and, perhaps because of their small size, nonaggressive habits, and localized distribution on the North American continent, little is known about their venom, the symptoms produced by the bite, or the treatment for this bite.

The Arizona coral snake or Sonoran coral snake, *Micrurus euryxanthus* (Kennicott), is a small animal, usually less than 20 inches in length, apparently of little medical importance in the area of its habitat. Lowe and Limbacher[1] stated that no case history of a bite was available to them from the state of Arizona up through 1961.

Micrurus fulvius tenere, the Harlequin snake or the Texas coral snake, is found in southwest Arkansas, western Louisiana, and from Texas to Mexico. The Texas coral snake has been found in both albino and black (melanistic) forms. Gloyd[2] has recorded a serious bite which followed the finding of such a melanistic snake by someone well aware of the characteristic markings of the species who was deceived by the black appearance. *Micrurus fulvius fulvius* (Harlequin snake, true coral snake) and *Micrurus fulvius barbouri* (South Florida coral snake) are both found on the Florida peninsula, *Micrurus fulvius barbouri* in the southernmost portion. The latter species is distinguished by the fact that it possesses no black spots in the red rings which surround its body. *Micrurus fulvius fulvius* extends northward into the central and northern Florida regions to Alabama, South Carolina, and the southern portion of North Carolina. One member of these species as large as 47½ inches in length has been officially reported by Neill[3] and recently Brackney[4] of Orange County, Florida, captured a 51 inch specimen in the yard of his home. As far as can be determined, this is the largest specimen of *Micrurus fulvius fulvius* unofficially reported. The average length observed is between 20 and 35 inches.

Generally speaking, the coral snakes are burrowing snakes, living under loose or loamy soil, under mold and leaf accumulation, or under lumber and cordwood. These snakes are frequently found in settled areas and are commonly uncovered by gardeners raking in flower beds. They apparently do not confine their activities to the night[3] as was once thought, although they are shy and elusive. Little is known about their life history and breeding habits, except that they are oviparous and lay eggs in the beginning of the summer which hatch toward the end of that season.

When coral snakes are captured, their movements are extremely rapid and apparently purposeless. These movements should not be regarded lightly, for experience in handling these snakes

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soon makes one realize that such apparently purposeless thrashing is well directed and designed to bring the snake's head close to a portion of the body of the person holding it. Four of the six persons whose deaths we have investigated were bitten in this manner.

Many rhymes and traditional admonitions have been developed as memory aids to distinguish the dangerous coral snake from other small snakes of similar configuration and color. If one includes the black or melanistic and the albino or white forms of this reptile, then one must consider the handling of almost any small snake to be a potentially perilous act, because identification by the uninformed may be difficult. Three of the patients who died as the result of being bitten did not realize they had a coral snake in their hands.

Venom

The two, small, fixed fangs produce shallow puncture wounds into which is introduced a venom of clear appearance. It flows down the surface of the fang from a duct at its base. In most instances observed in a colony of many coral snakes handled for purposes of "milking," the snake catches hold, pauses, and then appears to chew, first on one side of its mouth and then on the other. It might be assumed that a characteristic holding period during the bite aids the snake in introducing sufficient venom to immobilize its prey.[5] This is one of the many contrasts with the crotalids in which family the head is rapidly withdrawn after the insertion of the fangs.

"Milking" a two or three foot snake on a glass microscope slide produces only two wet areas, bare evidence of the venom which is, by far, the most toxic per milligram of dried weight of that of any snake in this country. It was observed that in 10 specimens of *Micrurus fulvius fulvius* which were permitted to bite, the amounts of venom available ranged from 1 mg. (poor bite) to as much as 12 or 13 mg. (good bites). All the snakes used in this experiment ranged in size from 1 foot 8 inches to 3 feet in length, but there was little correlation between snake length and the amount of venom produced.

Coral snake venom is almost purely paralytic in its action. Little or no tissue reaction occurs at the site of the bite, and the degree of pain is usually only that of the fang punctures. The severe paralytic symptomatology which occurs in the human being as the result of envenomation by the elapid is characteristic. The delayed onset of the symptoms of even a fatal bite, however, is peculiar to the venom of the coral snake and that of the krait.

In relatively minute doses in mice, symptoms of envenomation do not appear until six to 12 hours; but when they do occur, they are the same as the symptoms manifested in heavy envenomation which causes almost immediate death. Postmortem findings are: hemorrhage in the lungs, hemorrhage from body orifices, and some reddening of meninges. Postmortem pulmonary hemorrhage was present in the fatal case of a 14 month old Florida child.

Out of 277 venomous snake bites reported to the Florida State Board of Health in 1962, only seven were from the coral snake and none were fatal. The mortality rate has been estimated from 15 to 20 per cent to very high by Gloyd and Pope.[6] Willson,[7] in 1908, reported eight coral snake bites. Six of these resulted in death, apparently from respiratory paralysis. He concluded that such a high death rate could not be accepted because of the small series.

With the aid of the Florida State Board of Health, we polled the following states for coral snake deaths with these results:

Alabama—The past five years, one coral snake death.

Louisiana—1962, no coral snake deaths.

Georgia—Indefinite period, no coral snake deaths.

Kentucky—Three years, no coral snake deaths.

South Carolina—Past 41 years, no coral snake deaths.

Tennessee—No deaths due to coral snake bite.

Mississippi—1961-1962, one snake bite death, the kind of snake not identified.

Texas—1958-1961, no deaths specifically attributed to bites of a coral snake.

Arizona—1955-1962, no coral snake bite fatality.

New Mexico—Indefinite period, no coral snake fatalities.

Arkansas—As far as the Bureau knew, no fatalities from coral snake bite, and review from 1958 through 1961 revealed no coral snake bite fatalities reported.

Inquiries were directed to the National Institute of Health, Bogota, Colombia,[8] the Gorgas Memorial Laboratory, Colo Solo Hospital,[9] the Gorgas Hospital, Panama City, Panama,[10,11] United Fruit Hospital, Panama,[12] and the Hos-

pital San Juan de Dios, San Jose, Costa Rica.[13] None of these sources had definite evidence of a death due to a coral snake bite. Smith[11] after reviewing all snake bites recorded since 1908 in the Gorgas Hospital, Canal Zone, found three in adults who were handling the snakes under the impression they were "false corals." None of these patients presented any of the symptoms of envenomation. He also reported from Panama, "Last year some children were teasing a coral snake. Later it bit their pet dog and the dog died within one hour." This information cannot be considered as conclusive because of the unreliability of the vital statistics in some of these areas, but it points to the rarity of the accident in man.

Because of the limited size of the biting apparatus of this snake, it feeds upon small reptiles and is unable to penetrate clothing or to grasp any part of the human body, except the digits, with any degree of success. Certainly the rarity of the bite, and even rarer number of deaths from such an occurrence are due to this small biting apparatus and the nonaggressive characteristics of the snake.

The clinical picture of coral snake bite was described by Willson[7] as one of drowsiness, weakness, a sense of glowing heat and marked prostration with ascending paralysis. Two of the six deaths he reported occurred in the first 24 hours; in the others he did not describe the time of death in relation to bite. Shannon[14] concluded, "The neurotoxic venom of the coral snake does not have the sledgehammer effects of the hemotoxins (crotalids). . . ." He agreed that the sensorium is not greatly altered and that gradual severe paralysis and areflexia can occur, eventually leading to respiratory paralysis and death.

With the aid of personal communications[15-17] and the recent case report by Ramsey and Klickstein,[18] we offer the following summary of the symptoms of coral snake envenomation:

Immediate findings were one, two, or more tiny puncture wounds, dependent on the number of bites, with pain usually insignificant or only in proportion to the size of these wounds. From one to seven and one-half hours after the bite, the following appeared: Apprehension, giddiness, dyspnea, nausea, salivation, vomiting and weakness were among the initial complaints; convulsions occurred in two of six fatal cases; paralysis made its appearance as late as four to seven and one-half hours post-bite and was usually of a bulbar type, involving the cranial motor nerves, death ensuing within an hour or two from respiratory paralysis. Once symptoms appeared, progression was alarmingly rapid. In those patients placed in a respirator, or in those surviving the initial bulbar paralysis, peripheral paralysis occurred, and in three instances, this became complete prior to death. The sensorium remained clear in all patients as long as oxygen exchange was maintained by respirator or other means.

The following report by Dr. William A. Mulford,[15] of Green Cove Springs, Fla., represents a careful, accurate, hospital observation of a fatality and demonstrates the extreme problem in prognostication and treatment. This is the clinical summary in the case of Vincent DePaul Henderson,* of 3149 Gilmore Street, Jacksonville, Florida who died as the result of the bite of a coral snake.

Report of Case

This 13 year old boy, at approximately 9:15 a.m. on July 21, 1961, while cutting grass at the family fish camp, noticed a brightly colored snake attempting to get away from his lawn mower. Because he was interested in snakes, he picked it up to show to his companion for identification. He held it in his hand by the neck, and when his friend told him it was a coral snake, in his alarm, he lost his grip and the snake bit him on the end of the left ring finger. It held on so tightly that, despite all attempts to fling or pull it off, it remained in place for at least a minute and possibly more. The snake was subsequently killed and brought to the hospital where it was definitely identified by Ross Allen as the North American coral snake, *Micrurus fulvius fulvius*. It was 22½ inches in length. The boy delayed coming to the hospital until approximately 10:30 a.m. At the time of admission, the patient, although frightened, had no presenting symptoms whatever. One hundred milligrams of Sparine was administered together with 50 mg. of Demerol, because of associated pain from incision and suction. At the time, he had no pain in the bite area and no swelling until the wounds and suction were applied. The past medical history was negative except for acute nephritis at age nine with complete recovery.

He was a husky white schoolboy, large for his age, being at least six feet in height. Physical examination revealed a blood pressure of 120/64 mm. Hg, pulse rate of 88 and temperature of 98.4 F. He did not appear acutely ill and was ambulatory on admission. Examination of the skin revealed two fang marks on the dorsum of the left ring finger over the distal interphalangeal joint. There were no other marks or swelling on the finger. No other abnormalities were evident to careful examination of all systems.

Immediately upon identification of the snake, the Biological Supply Center at the State Board of Health in Jacksonville was contacted and within 45 minutes, antivenin manufactured by the Instituto Butantan in Sao Paulo, Brazil, which is specifically for the Brazilian snake, *Micrurus corallinus*, was received and 120 cc. was administered intramuscularly, after an appropriate skin test gave negative results. In addition to the antivenin, the boy was given 0.5 cc. tetanus toxoid and subsequently was given intramuscular Terramycin, 100 mg. every six hours.

*Permission to publish the name of the patient and other details has been granted solely to The Journal and to Drs. Mulford, McCollough and Gennaro.

On admission, the urine and blood studies were essentially normal. Suction was continued for approximately two hours over the fang marks with the tourniquet in place, the tourniquet being released at intervals.

The patient was placed in a room in bed under private nurses' observation. There was a slight amount of edema of the bitten finger and hand which was somewhat aggravated by the tourniquet. Other than this, the boy responded well to verbal and all other stimuli and appeared to be in complete control of all faculties. At 5:00 p.m., approximately seven and one-half hours after he was bitten and, approximately five and one-half hours after the administration of antivenin, he began to complain of dyspnea and was salivating rather profusely. He did, however, swallow some liquids. At that time, examination revealed a definite oculomotor palsy, the pupils being of moderate size, equal and fixed centrally. There was paralysis of the levator palpebrae muscle with absolutely no lateral rotation of the orbits. Paralysis of the lingual nerve, the seventh cranial nerve and the ninth cranial nerve all appeared in rapid succession while I was watching the boy. During this period, and subsequently, he was completely conscious. The reflexes in both lower extremities appeared to be hyperactive and equal throughout. He began to respond by wriggling his toes and elevating his scalp as a "yes" response and no motion at all as a "no" response. He stated that he felt numb but that he had no pain. He retained the ability to elevate the front of the scalp to the end, even when the rest of the paralysis was complete.

At approximately 7:15 p.m., his breathing became irregular and shallow and he was placed in an iron lung. His color then improved and his pulse slowed. At this time, it became evident that he had large mass motion of his lower extremities only. He still responded to noxious stimuli and wriggled his toes and elevated his forehead in response to questioning. At approximately 9:00 p.m., he was given an additional 120 cc. of antivenin, intravenously. At this time, paralysis was complete. He was vomiting clear gastric contents at intervals and had profuse diaphoresis. His pulse was regular and full and his color was good. Mucus collected constantly in his throat and was suctioned. A plastic airway was inserted which maintained a good airway and tracheotomy was not deemed necessary, especially considering its difficulty with the iron lung. At 11:00 p.m., a retention catheter was inserted and approximately 250 cc. of dark yellowish urine was obtained. By 5:30 a.m., he was completely unresponsive except that he could raise his forehead as previously described. The blood pressure and pulse were still constant. At 6:30 a.m., the pulse began to become irregular and it was noted that the urine was a dark amber color. The blood pressure and temperature remained within normal limits, but the pulse was becoming quite rapid and irregular, 96 per minute in rate. Blood was drawn at 9:00 a.m., and the hematocrit level was still 45. The urine contained 4 plus albumin, pH of 6 and specific gravity of 1.020; it was negative for bile and urobilinogen. The color was interpreted to be the result of the administered antivenin. The alkaline phosphatase was 12.0. These specimens were drawn just prior to death. An electrocardiogram could not be obtained because of the iron lung; however, it was thought that the boy was going into congestive failure and preparations were in progress to digitalize him when the heart abruptly stopped beating and he expired at 9:30 a.m.

Treatment

Treatment is dependent entirely upon the prognostic signs of severe envenomation, or the appearance of the actual symptoms of severe envenomation, if positive identification of the snake is not made. A superficial scratch of the epidermis by a fang or fangs is insufficient to warrant the use of incision or antivenin. Because such minute quantities of venom produce severe intoxication, the location of the bite should be washed prior to incision, lest this be made a portal of entry for the venom which otherwise would lie harmlessly on the skin. Given the presence of fang punctures and a long holding period by a snake definitely identified as a coral, there is no evidence yet to show that a complete tourniquet, incision and suction, excision, or even amputation of a portion of a digit might not all be helpful or life-saving procedures if performed immediately. In anticipation of the onset of rapidly progressive bulbar paralysis, with or without respiratory obstruction, the physician must provide the facilities for tracheotomy, a respirator and a supply of oxygen.

The antivenin which is used in the treatment of coral snake bite in this country is manufactured in Brazil against the venom of the South American coral snake. It is a salt-precipitated equine globulin preparation supplied in 10 cc. ampules, and is not produced under the auspices of the health authorities of this country.

The following is a duplication of the circular found in each package:

Micrurus corallinus

This snake is found in certain regions of Brazil. This antivenom serum has the therapeutic power to neutralize certain minimum lethal doses of venom, according to standards set up by Vital Brazil.

Snakes Bites

In case of snake bites, the serum should be used as follows:

Severe cases:	80 - 120 cc.
Moderately severe cases:	40 - 60 cc.
Light severe cases:	20 - 40 cc.

The doses may be repeated each 4 to 6 hours until the patient has recovered.

The same size doses are given to children, or even greater, because the toxicity is greater, due to the comparatively lighter body weight.

In the fatal case described herein, 280 cc. of this antivenin was used, the first doses being given approximately one and one-half to two hours postbite. It apparently had no influence upon the outcome.

Keegan, Whittemore and Flanigan[19] neutralized the venom of the American coral snake with this antivenin in vitro, injected the combination into mice, and reported that it was of definite value in neutralizing the toxicity of the venom. Antivenin made from the venom of the Indian cobra has been used in attempts to treat coral snake bite with no success.[20] It has been found in our laboratory, after intraperitoneal or intravenous injection into mice, that Brazilian antivenin pro-

duces convulsions and temporary paralysis, but all 20 of the mice utilized survived. At present it is the only available antiserum for the treatment of this type of envenomation. An attempt should be made to develop an antivenin for the venom of the coral snake which can be administered intravenously.

The graceful conformation and beautiful coloring of this snake are in direct contrast to the heavy-bodied, broad-headed crotalid, and this contrast is just as marked in the reaction of human tissue to their venom. After the death of a teen-age boy, six hours post-bite from a coral snake, a class ring was removed from the bitten finger,[16] and, yet, in crotalids, such a bite might lead to such massive edema and proteolytic action that the entire hand could be lost. Whereas the immediate severity of the local and systemic action of the crotalid bite is an indication of the degree of the gravity of the envenomation and a guide as to the urgency of therapy, the physician confronted with a positively identified coral snake bite is forced to assess the situation from other prognostic signs; the small indentations of the fangs through the skin one-fourth to three-eighths inch apart, which may or may not bleed, and a description by the victim as to how long the snake held on. In five of the seven bites reviewed, there was a history of the snake holding to the victim for a minute or longer, or repeated bites were present.[17] The duration of the holding period by the snake has also been mentioned by Klauber[5] and Mulford[15] as of clinical significance in prognostication.

In Florida and other areas of the South, unexplained nausea, vomiting, convulsions and paralytic symptoms particularly involving the muscles supplied by the cranial nerves and the accessory nerves of respiration, in an infant or child who is young enough that an accurate history is unobtainable and who has been ambulatory in wooded areas, pose the additional consideration of coral snake bite in the differential diagnosis.

Future study by the Florida Medical Association and the Florida State Board of Health regarding the frequency of coral snake bites in the state, and the factors surrounding the bites, the time elapsed until treatment, the symptomatology, the treatment given and the outcome will through a period of years bring much clarification of this rare but important problem.

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Snakebites in Florida

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and George W. Gehres, B.S., M.P.H.**
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During the year 1962, 277 snake bites were reported to the State Board of Health by Florida hospitals. Three fatalities occurred. The original intent of this reporting was to furnish names of snake bite victims and names of treating physicians to the Subcommittee on Venomous Snake Bite of the Florida Medical Association, but it became evident early in the reporting year that the incidence of snake bite and the reporting by the hospitals would be much higher than was originally anticipated. The decision was made to broaden the scope of the survey to ascertain if any epidemiological data could be determined and possibly be used in snake bite prevention activities.

Methods

Florida hospitals were asked to report snake bites to the State Board of Health. A postal card was used and the information asked was "name and address of victim, age, name of treating physician, name of hospital, date and kind of snake." When the cards were received, copies were sent to the Subcommittee on Venomous Snake Bite for its use and the victims of snake bite were contacted by letter, with a form that could be easily checked to indicate circumstances surrounding the incident. Tables of the data follow.

Findings

Table 1.—Snake Bites Reported by Months—1962

January	14
February	8
March	15
April	20
May	36
June	28
July	34
August	44
September	29
October	26
November	12
December	11
Total	277
Monthly mean for year	23
Monthly mean for warmer months (May-October)	32
Monthly mean for cooler months (November-April)	13

A study of table 1 reveals that during the warmer months of the year (May through October), 197 bites or 71 per cent of the total were reported, and during the cooler months of the year (November through April), there were 80 bites or 29 per cent of the total. There was a definite seasonal pattern, which was more evident in the northern portion than in the southern portion of the state. Peak month for the state was August, when 16 per cent of the total bites was reported.

Table 2.—Bites Reported by Species

Species	Total Bites Reported	Percentage Reported Bites	Percentage Venomous Bites
Diamondback rattler *Crotalus adamanteus*	73	27%	41%
Cottonmouth moccasin *Agkistrodon piscivorus*	46	16%	26%
Pigmy ground rattler *Sistrurus miliarius*	45	16%	25%
Copperhead *Agkistrodon contortrix*	8	3%	5%
Coral snake *Micrurus fulvius*	7	3%	4%
Unidentified and nonvenomous	98	35%	

Canebreak rattlers *(Crotalus horridus atricaudatus)* have been observed in Florida, but no bites were reported.

The diamondback rattler is the chief culprit and poses a medical problem of note since it is the largest of the rattlesnakes and it ranks among the world's deadliest snakes.[1] Its venom has a considerable necrotizing effect.[2] During the year, there were three fatalities, all following envenomation by diamondback rattlers *(C. adamanteus)*. The fatalities were all in male victims—one 15 year old male, bitten on the ankle, in Brevard County; a 19 year old male, bitten on the hand, in Hillsborough County, and a 47 year old male, site of bite unknown, in Putnam County. It has been estimated that there are 1,500 venomous snake bites annually in the United States.[3] Florida has 5 per cent of the nation's population and 12 per cent of the venomous snake bites according to this estimate.

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Table 3.—Age and Sex of Victims

10 Year Age Distribution by Age and Sex

Age	Male	Female	Total	Percentage of Total
0- 9	45	30	75	27%
10-19	63	12	75	27%
20-29	31	8	39	14%
30-39	29	10	39	14%
40-49	18	3	21	8%
50-59	8	6	14	5%
60 and over	8	6	14	5%

From table 3, it can be easily determined that the greater number of bites occurs in the lower age groups. Under the age of 20 there was reported 54 per cent of the bites and an additional 28 per cent between the ages of 20 and 39 years. Actually, 82 per cent of the reported bites occurred in age groups which include only 62 per cent of the population, that is, under the age of 40. Reported snake bites in males were three times as frequent as those in females. There was no statistical correlation between the age of the individual or the sex of the individual and the kind of biting snake.

Table 4.—Reported Snake Bites by Selected Age and Season

		Warm Months May-October	Cool Months November-April	Total
0- 4	Preschool	32	9	41
5-19	School	90	21	111
20-39	Young adults	39	39	78
40-59	Middle age	26	7	33
60 and over	Elderly	11	3	14
Totals		198	79	277

From table 4, it is evident that there is a seasonal variation with most age groups. Except for the young adult group (20-39) there are four times as many bites reported during the warm months as during the cool months. Behavior patterns probably account for this seasonal variation. Young children and the elderly do not wander far from their homes. During the school year when outdoor activities are limited by school and planned recreational programs, plus shorter daylight periods, potential exposure is curtailed for children. When these restrictions in activity are not in force, there are more opportunities to follow their natural intuitive curiosity to investigate living things. Certain species of snakes, including the rattlesnakes, increase this hazard since they are most alert in the 80 to 90 degree temperature range.

Regional Patterns

Florida may be divided into four biological regions which reflect differing annual temperature patterns, rainfall patterns, faunal life and soils.[4] The northern portion of the state, north of Ocala but excluding the counties on the Atlantic Ocean, is designated as Louisianian. The central section of the state, south of Ocala and north of Lake Okeechobee, including the Atlantic Ocean counties north of Cape Canaveral, is designated as Floridian. Counties south of Lake Okeechobee and including Atlantic coastal counties south of Cape Canaveral are designated as Subtropical. The Florida Keys are designated as Tropical.

Table 5 reveals that the statewide snake bite morbidity is 5.2 per 100,000. The population density in the state increases from north to south. Morbidity decreases as an increase in population density is observed, so that there is a negative correlation between population density and morbidity. Significance tests of snake bites by species within regions show that the type of snake bite is not dependent on the region. Whether the region and its snake bite morbidity reflect population density or biological factors affecting the reptiles is not evident and could be the basis for further study.

Information From Victims

There are 185 hospitals in Florida and 85 of the hospitals or approximately 50 per cent reported treating snake bites during the year. Questionnaires were sent to all victims (277) and 163 completed questionnaires were received, representing a 59 per cent return. Information about the circumstances surrounding the actual biting incidents is presented.

Table 5.—Biological Regions in Florida: Selected Statistics

	Population 1962	Square Miles	Population Density Per Square Mile	Bites Reported	Morbidity per 100,000
Louisianian	1,456,600	24,176	60	101	6.9
Floridian	1,865,200	17,137	109	106	3.5
Subtropical	1,974,200	12,889	153	69	5.7
Tropical	53,900	50	1,078	1	1.9
Totals	5,349,900	54,252	99	277	5.2

Table 6.—Body Sites of Bites

	Total	Percentage of Bites
Upper Extremities	77	
Fingers	53	34%
Hands	8	5%
Lower arms	14	9%
Upper arms	2	2%
Lower Extremities	78	
Toes	6	4%
Feet	41	26%
Lower legs	29	18%
Upper legs	2	2%

It is interesting to note that there was an almost equal number of bites reported by victims to the upper and to the lower extremities. No bites were reported on the trunk, neck or head. The most frequent bite site, accounting for a third of the bites, was the fingers, followed by the feet, accounting for a quarter of the bites. Most of the victims stated that they reached or stepped near the snakes, and 10 per cent stated that they were bitten through clothing.

Table 7.—Location of the Snake

Open ground	56
In house or building	15
In garden	13
In weeds	10
Under debris	8
In cage	7
On a stump	7
In a hole	1
Total	117

Twenty per cent of these bites occurred in persons who were attempting to catch or kill snakes. It must be noted here that parents were unable to elicit this information from the very young. Seven of the questionnaires revealed that pet snakes or snakes being handled for venom milking operations were involved in biting incidents. It was evident from reading the questionnaires that in a very high percentage of instances the victims were close to their homes when bitten. During the period of the survey, five professional snake handlers were bitten, including one handler who reported that he had survived his seventy-ninth venomous snake bite, this one by a 14 foot king cobra. One professional snake handler suffered two diamondback rattler bites during the year. Almost 15 per cent of the victims reported that they had previously been bitten by snakes.

Emergency measures reported were: Three quarters of the victims had tourniquets applied, one half had the fang marks cut and suction applied, and one third had limbs immersed in ice water (cryotherapy). Although the question was not specifically asked, from the descriptions written, it appears that most victims received hospital care promptly. No doubt the high survival rate was due to the combination of rapid transportation to medical aid and the excellent treatment given by the hospital staffs.

Table 8.—Emergency Measures Employed

	Total	Percentage
Tourniquet Applied		
Yes	111	72%
No	44	28%
Fang Marks Cut and Suction Applied		
Yes	87	56%
Cup	60	
Mouth	27	
No	67	44%
Cryotherapy Used		
Yes	58	40%
No	88	60%

Table 9.—Time of Day

	Bites Reported	Percentage of Bites
Midnight to 6 a.m.	1	1%
6 a.m. to noon	44	27%
Noon to 6 p.m.	81	52%
6 p.m. to midnight	30	20%
Total	156	

From table 9 it is noted that between noon and 6:00 p.m., almost one half of the bites were reported and most of the rest of the bites occurred during daylight hours. The protective coloration of snakes is obviously excellent since almost all of the victims stated that they did not see the snakes when the snakes were in their natural habitats during daylight periods.

Summary

Snake bite morbidity in Florida, as reported by hospitals, was 5.2 per 100,000 during 1962.

Snake bite mortality during 1962 was three males, all bitten by diamondback rattlers *(C. adamanteus)*.

Of the 277 bites reported, 72 per cent were by venomous snakes, of which the diamondback rattler accounted for 41 per cent of the venomous bites.

There is a seasonal pattern. More snake bites are reported between May and October (71 per cent) than during the rest of the year (29 per cent).

Snake bite morbidity is three times as high for male as for female victims.

Snake bite is primarily a problem of younger age groups with 54 per cent of the bites occurring in persons under the age of 20.

The snake bite morbidity rate increases as population density decreases.

A high percentage of victims is bitten by snakes while in the vicinity of their homes, according to questionnaires returned.

Emergency measures were carried out for two thirds of the victims, and almost all of the victims were quickly transported to and treated in hospitals.

A substantial number of factors surrounding snake bite incidents need further investigation. These include study of the ecology of venomous snakes, relationship of urbanization and incidence of snake bite, and establishment of educational techniques for snake bite prevention.

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P. O. Box 210.

Location of Coral Snake Antivenin Serum in Florida

1. Emergency Fire and Rescue Squad
   Tampa Fire Department
   Tampa
2. Indian River Memorial Hospital
   Vero Beach
3. Baptist Hospital
   Pensacola
4. Dade County Health Department
   1350 N. W. Fourteenth Street
   Miami 35
5. Orange County Health Department and Orange Memorial Hospital
   832 West Central Avenue
   Orlando
6. Palm Beach County—All Hospitals in County
   West Palm Beach
7. Leon County Health Department
   Corner S. Gadsden and Gaines Streets
   Tallahassee
8. Bay County Health Department
   624 East Sixth Street
   Panama City
9. Monroe County Health Department
   Corner Thomas and Fleming Streets
   Key West
10. Florida State Board of Health
    1217 Pearl Street
    Jacksonville
11. St. Vincent's Hospital
    Barrs Street
    Jacksonville
12. Baptist Memorial Hospital
    800 Miami Road
    Jacksonville
13. Sarasota Memorial Hospital
    1901 Arlington Street
    Sarasota

Summary of Snake Bite Treatment

First Aid

The symptoms and gravity of the bite of the venomous snakes of the United States and Canada are due to the location of the bite, the toxicity of the venom of the species, the amount of venom, the depth to which it is injected, the age and health of the victim as well as of the snake, and the nature and effectiveness of first aid treatment. Treatment, to be effective, must accord with the appearance of the symptoms of envenomation and the circumstances governing the rapidity with which a patient can be placed under medical care.

1. Immobilization.—Systemic immobilization is effected by body rest and locally is obtained by splinting. Both limit to a degree the spread of the venom.

2. Tourniquet.—A tourniquet lightly occlusive in the field during a 30 to 60 minute period of incision and suction has not been proved to be of value experimentally, but would seem to possess some advantages. In unusual situations where the immediate systemic effects of the bite appear to be catastrophic, a completely occlusive tourniquet may be elected with the knowledge that sacrifice of the extremity may be necessary for the preservation of life. If medical care is hours away and local signs and symptoms are of an advanced nature (Grade III or IV), therapy of this type, though radical, could prevent a fatality or more extensive extremity damage. The release of such a complete tourniquet prior to amputation can have fatal consequences secondary to an immediate overwhelming toxemia from the venom or venom products combined below it. Antivenin should be given intravenously prior to this maneuver.

3. Incision and Suction.—Percutaneous incisions ¼ inch long across each fang mark should be made in order to open the wound for more efficient suction if evaluation of the bite after three to five minutes indicates local or systemic symptoms of venom injection which would require removal. Suction should be by cup preferably, or by mouth, and may be discontinued in 30 to 60 minutes. Multiple incisions following the line of proximal swelling are not useful for the removal of venom, but may be employed under hospital conditions to reduce subcutaneous tensions and ischemia by draining the edema. Such swelling about the wrist or hand, ankle or foot, requires relaxation incisions (fasciotomy) in order to provide blood to the ischemic part. Because subfascial tensions are so great, single long incisions through the skin and fascia, one directly beneath the other, can lead to massive muscle and tendon herniation. This may in itself produce an insoluble problem. Multiple subcutaneous fasciotomies through small transverse skin incisions would seem more advisable.

4. Cryotherapy.—Packing or immersion of an extremity in ice has no place in the treatment of snake bite unless amputation at or slightly above the tourniquet level is anticipated. An ice cap (dry cooling) over the site of the bite for relief of pain would seem to be permissible, especially prior to the administration of antivenin. It must be remembered that cooling during the administration of the antivenin radically reduces the access of the antiserum to the bite area.

5. Antivenin.—The antiserum is the keystone to the therapy of snake bite. Because of its foreign protein nature, however, careful evaluation of the severity of the bite and the patient's sensitivity should be made before its use. The severity of the bite determines the route of administration of antivenin. It may not need to be used in bites of Grade O or I. In Grade II bites, the intramuscular injection on the side of the body opposite the bite may suffice to halt the swelling and to interrupt the progressive tissue necrosis. In Grades III and IV envenomation shock and systemic effects require that the intravenous route be utilized. In bites producing symptoms of this severity, antivenin must be given in amounts large enough to produce clinical improvement. Ten to 20 units are not unrealistic. While small amounts may bring transitory betterment, subsequent relapse can occur beyond which reversal is even more difficult. Permanent remission of swelling and interruption of necrosis are the therapeutic end point in the clinical use of the antiserum.

Newton C. McCollough, M.D.
Orlando
Joseph F. Gennaro Jr., Ph.D.
Gainesville

Association News



Warren Wilson Quillian, M.D.
Eighty-Third President

Assuming the office of President of the Florida Medical Association at the Annual Meeting in May, Dr. Warren Wilson Quillian brings to that post of high responsibility a wealth of leadership experience and a distinguished record of service to the Association and in broader fields of medicine. A Georgian, Dr. Quillian was born in Atlanta in 1901 and received his academic and professional schooling there. He was awarded the Bachelor of Science degree in 1922 and the degree of Doctor of Medicine in 1924 by Emory University. After completing an internship and a residency at Grady Memorial Hospital in Atlanta, he served a residency at the U. S. Marine Hospital in Savannah. He is a member of Phi Beta Kappa and Alpha Omega Alpha.

Since 1926 Dr. Quillian has practiced pediatrics in Coral Gables. He has served as Director of Pediatrics and Chief of Staff at Jackson Memorial Hospital, Miami, is on the attending staff at Doctors Hospital, Coral Gables, and is consultant to Variety Children's Hospital and National Children's Cardiac Home, Miami. He is a former president and trustee of the Dade County Medical Association. Since 1955 he has been Clinical Professor of Pediatrics at the University of Miami School of Medicine and since 1960 a member of the Board of Trustees of the University of Miami.

A life member of the Florida Medical Association, Dr. Quillian has held membership on the Board of Governors since 1960 and served on its executive committee last year by virtue of his office of President-Elect of the Association. In 1959, he was chairman of the Committee on Councilor Districts and Council and since 1939 he has been a member of the Committee on Child Health, serving as chairman for 12 of the 24 years. He was the first chairman of the School Health Medical Advisory Committee and has served as an Associate Editor of The Journal and a member of the Committee on Publication.

Dr. Quillian achieved national recognition as President of the American Academy of Pediatrics in 1951. He is a founder member and past president of the Florida Pediatric Society and has served as chairman of the Pediatric Section of the Southern Medical Association. A member of the American Medical Association and the Academy of International Medicine, he is also a fellow of the American College of Physicians. In 1952, the University of Florida conferred on him the honorary degree of Doctor of Science.

During World War II, Dr. Quillian served from 1942 to 1946 as a commander in the Medical Corps of the United States Navy and was assigned to duty in the Pacific Theatre of Operations.

Locally, Dr. Quillian is a member of the Methodist Church and of the Riviera Country Club. He also holds membership in the Biscayne Bay Yacht Club, Miami.

Dr. Quillian and Mrs. Quillian, the former Miss Rosabel Brown of Tennille, Ga., have two children, Harriet, now Mrs. W. A. Chipley, and Warren W. Quillian II, M.D.



As Dr. Annis addressed the Legislature, seated on the rostrum with him were, from left, Senator Harry Stratton, Speaker Pro-Tem of the Senate, Speaker of the House Mallory Horne and Senator Wilson Carraway, President of the Senate.

Dr. Edward R. Annis Addresses Joint Session of the Legislature

On Friday, April 12, at 11:00 a.m., the Florida State Legislature convened in joint session to hear Dr. Edward R. Annis, President-Elect of the American Medical Association.

The members of the Leon-Liberty-Jefferson County Medical Society and the officers of the Florida Medical Association met in the House Speaker's office prior to the meeting and were escorted onto the floor of the House by the Speaker, where they were seated on either side of the Speaker's rostrum. The Sergeant at Arms then announced that the Florida State Senate was present and escorted the Senators in. The President of the Senate, taking the rostrum with the Speaker and assuming the position of Speaker, then appointed a committee of three Senators to escort the distinguished guest, Dr. Annis, to the rostrum. Mr. Mallory Horne, Speaker of the House, introduced Dr. Annis.

Dr. Annis gave his usual inspiring talk on the philosophy of free enterprise and the thoughts of medicine regarding the Kerr-Mills Bill, emphasizing the fact that there is local control in this type of legislation, whereas other types do not permit this control. He very astutely avoided any partisan politics and was well received by the Legislature.

At 5:30 p.m. he talked to the Leon-Liberty-Jefferson County Medical Society, and guests were present from numerous other county societies in the area.

Later in the evening a party was held at the home of Dr. and Mrs. Edward G. Haskell Jr., honoring President and Mrs. Wilson Carraway, Speaker and Mrs. Mallory Horne, Representative Don Fuqua and Dr. Annis. This occasion was enjoyed by the medical profession and local townspeople.

Francis T. Holland, M.D.
Tallahassee



Editorials

Venomous Snake Bite

Venomous snakes have always been mysterious, fascinating members of the animal kingdom, venerated, worshipped and envisioned as possessed by evil spirits. They have been utilized as instruments for suicide and homicide. The Seminole Indians of Florida, because of religious beliefs, even today will let no harm come to any snake, venomous or not. In 1770, William Bartram regarded the rattlesnake as "a wonderful creature when we consider his form, nature and disposition. It is certain that he is capable by a puncture or scratch from one of his fangs not only to kill the largest animal in America, and that in a few minutes time, but to turn the whole body into corruption." "The moccasin," he said, "is a large and horrid serpent. . . . Their bite is always incurable. The flesh for a considerable space about the wound rotting to the bone." In 1791, death was attributed by Thwaites and Josselyn to noxious vapors from the fangs. The forked tongue and also the tail have been considered its source. According to Klauber, Charas (1664-1673), a French chemist, maintained that the virulence lay in the enraged spirits of the viper; he was in dispute with Redi, an Italian, who correctly, by experimentation, revealed the damage was caused by a yellow liquid issued from the fangs.

Collection and preservation by freeze-drying of crotalid venom have preserved its potency. Many biologists and chemists have tried, by analyzing its components, to explain its reaction when it is injected beneath the skin of living tissue. This has not been completely accomplished, and apparently by-products of the venom reacting upon the tissues are, in some instances, as lethal as the venom itself. Still more amazing is the observation that the epithelial cells of the skin or the alimentary canal form essentially complete barriers against it.

The treatment of the intensely frightening pathologic condition which immediately arises systemically and locally when venom of the Eastern diamondback rattlesnake is injected beneath the skin of man or an animal has been even more bizarre historically than the fantastic portrayal of its origins. Until Dudley Jackson, in 1926, proved by animal experimentation that a substance removed by incision and suction from the experimentally bitten leg of a dog was lethal and could be neutralized by antivenin and was, therefore, venom, we physicians in the United States had little concrete in the literature by which we could outline treatment.

Each new remedy which might conceivably be of value in the treatment of any similar extremity ailment, insect or scorpion bite, gangrene, tumefaction, necrosis from any cause or infection has been applied to relieve those suffering from snake bite. Poulticing of all types, multiple incisions, heat, whiskey, corticosteroids and refrigeration have been tried and found wanting.

Cryotherapy, or refrigeration, was popularized in 1954, through newspaper and sporting magazine articles. It was accepted by the profession and by the laity, in spite of the fact that Frederick M. Allen, in 1938 and 1940, had shown, in dogs, that injury by venom to an extremity was made more severe by the added injury of prolonged cold. Allen's work was effectively and dramatically substantiated by Guzman, Ya and Perry in 1961. These investigators concluded that refrigeration is justified in venomous snake bite *only* when amputation of the extremity is anticipated. With all of this information against the use of cryotherapy in snake bite fully documented, on March 1, 1963, one of the most widely read weekly periodicals in the world published an article

on snakes. A recommendation as to therapy was prefaced by this naive statement, "The methods of treating snake bite are simple and effective." A general outline of acceptable treatment was then given, with this major exception, "Next the limb should be immobilized and packed with crushed ice or cold water. Cooling of the area slows the venom and lessens its corroding effects on the skin, tissue and muscles." This inaccurate and misleading statement which places no limit as to time that the bitten limb should be packed in ice has been read and, perhaps believed, by millions of readers in North and South America.

If this therapy is as loosely adopted as directed, it can lead to more severe damage to the extremities of those victims who utilize it than otherwise would occur. The mere continuous icing of a hand for 12 to 24 hours could, in itself alone, without the presence of snake bite, result in loss of fingers, if not the entire member. The deceptive feeling of well-being and lack of swelling of a snake-bitten extremity which follow the initial pain of ice packing are rapidly and dramatically reversed when the warming-up period occurs. The spread of the venom throughout the immersed portion has not been slowed one iota, even though, temporarily, its destructiveness is delayed. Gennaro has shown the entrance of antivenin into the bitten extremity to be reduced as much as 95 per cent by the use of cold. Any normal hand, or one poisoned by venom, or one removed from its life source by amputation, can be refrigerated and will keep well for days, but decomposition will eventuate in all three instances when cooling is removed.

Snake venom from a functional standpoint has not been primarily an adaption to protect, but rather, to feed the snake. Gennaro, Plata, and Amaral have noted the almost immediate death it causes in those animals which are habitually food for that species of snake. Marked variations have been observed in the time of kill in those animals which the snake rarely or never contacts for self sustenance. Thus, the reactions of venom in human tissues from the same family of snakes may be almost unpredictable, and dependent upon allergic and immune responses, not only to the complex protein which is venom, but to the other proteins and substances released when the venom acts upon the tissues of the individual.

Also, considering the variabilities in the amount of venom injected, a true clinical picture of snake bite in a human being from a given species, such as the Eastern diamondback rattlesnake, becomes extremely difficult to portray. Hemorrhagic, neurotoxic or paralytic and hemolytic features or severe local necrosis may be present alone or in combinations thereof as the consequence of envenomation. The physician must be prepared to recognize these combinations and evaluate the demand for immediate treatment in proportion to their gravity. There is no question that the administration of intravenous antivenin in large amounts has been proved experimentally to be the most effective therapy in combating both systemic and local damage by venom. This has been substantiated in a limited number of cases clinically and it appears, from the reports of other workers, that in the future this will become the accepted form of treatment.

As shown by data collected by the Florida State Board of Health for the year 1962, the young are the major victims of venomous snake bite. Extreme activity, unquenchable curiosity, lack of caution and education, and inexperience are certainly the major reasons. Unfortunately, envenomation, particularly in a child, can provoke a critical situation almost immediately, and for this reason, the treatment becomes a matter of great urgency. Although true that such incidents are very uncommon, any of us may be confronted one day with such an emergency and must have the knowledge necessary to manage it properly.

Newton C. McCollough, M.D.
Orlando

Florida Snake Bite Data — 1963

Prior to January 1962 the state of Florida, though second only to Texas in incidence of snake bite cases, had no organized system for gathering and correlating data on this subject. It was through the Florida Medical Association Subcommittee on Venomous Snake Bite, cooperating with the Florida State Board of Health, that the first attack upon this problem was instituted. They prepared a questionnaire which was sent to all hospitals in the state so that each snake bite case

could be reported. The information requested included the name and address of the patient and the name and address of the attending physician, as well as the date when the bite was received. Upon receipt of each such report a clinical sheet was sent to the physician requesting the data pertinent to the study in such form as to permit coding on IBM cards for statistical analysis. Regional committee members and subcommittees in strategic locations throughout the state were appointed to follow up initial reports to the Florida registry by investigation of hospital records to assure the obtaining of all pertinent clinical data.

By Jan. 1, 1963, the State Board of Health was able to report evaluation drawn from the 277 reported snake bites received up to that time. Of these, approximately 75 per cent were from venomous snakes with three fatalities. The location spotted on the map of the state showed the Jacksonville area as having the greatest number, followed by the Miami, Orlando, St. Petersburg, Tampa, Palm Beach and Lakeland areas. Only 8 per cent of the victims were above the age of 50, as against 58 per cent aged 20 years or younger. These important data have bearing upon the educational approach toward snake bite prevention.

Some problems were encountered in interpreting the reports. One of these was in identifying the snake involved, particularly the copperheads. Pygmy rattlers, moccasins and diamondback rattlers accounted for most of the bites. Only five coral snake bites had been reported up to that time.

The principal efforts of the Committee are now directed toward compiling three to five years' experience. With this objective in view the Committee has developed a new clinical evaluation sheet to facilitate IBM card coding. The reports will be in detail recording all positive and negative findings. Final analysis of recorded data will clearly illustrate the extreme value in continuing this research. A sincere plea is made to all members of the Association and hospital personnel receiving snake bite cases to cooperate with this Committee by promptly filling out the reports as requested. Failure of medical and hospital personnel to mail the initial card, which is the key to the entire plan, will break down the whole study and prevent the Association from fulfilling this obligation to the citizens of the state.

John E. Dees, M.D.
Miami

News

Dr. Peritz Scheinberg of Miami has been appointed chairman of the recently established Department of Neurology at the University of Miami School of Medicine. The new Department was a division of the Department of Medicine.

A Lymphoma-Leukemia Symposium is being held at Orlando June 14 at the Robert Meyer Motor Inn under sponsorship of the Department of Education, Orange Memorial Hospital, the Florida State Board of Health and the Florida Division of the American Cancer Society. Speakers include Dr. Lemuel W. Diggs of Memphis, Tenn.; Dr. Emil Frei, National Cancer Institute, Maryland, and Dr. Benjamin R. Gendel of Atlanta. The sessions begin at 10:00 a.m.

Barry Michaels, a student at Miami Central High School at Miami, won the Florida Medical Association's first place senior award in the 1963 State Science Fair held at Tampa. Young Michaels received a $100 U. S. Savings Bond for his exhibit entitled "Experimental Research on Interferon." The first place junior award from the Association was presented to Patty Davis, a student at Horace Mann Junior High School at Brandon. The four honorable mention awards given by the Woman's Auxiliary to the Florida Medical Association were presented to Lynn Barger, Westwood Junior High School, Gainesville; Linda Brown, Robert E. Lee High School, Jacksonville; Edward Duffy, Stranahan Senior High School, Fort Lauderdale, and Arnold Klein, North Miami Senior High School, Miami.

Dr. Wiley M. Sams of Miami has been elected president of the American Dermatological Association.

Dr. Wilson T. Sowder of Jacksonville, State Health Officer, has been appointed to serve on the national accreditation program for nursing homes jointly sponsored by the American Medical Association and the American Nursing Home Association.

Dr. Samuel M. Day of Jacksonville, Secretary-Treasurer of the Florida Medical Association, attended the meeting of the Florida State Dental Society in Jacksonville as the official representative of the Association.

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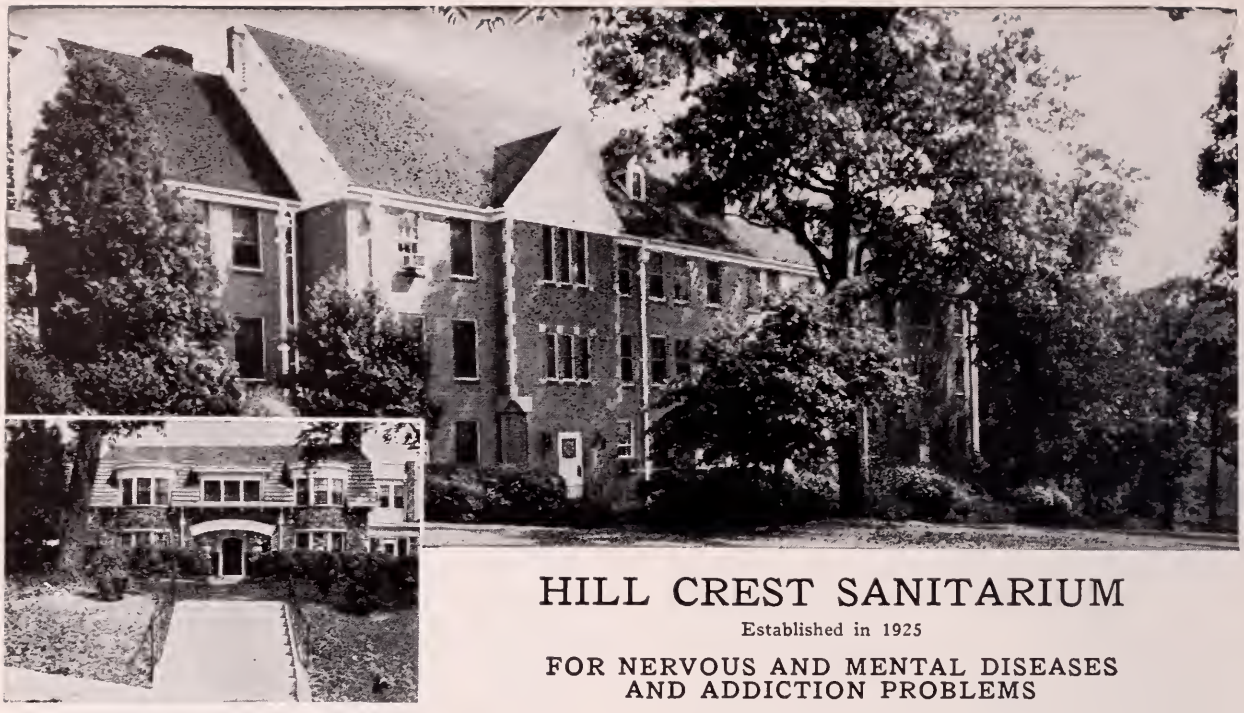
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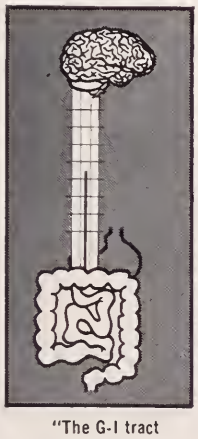
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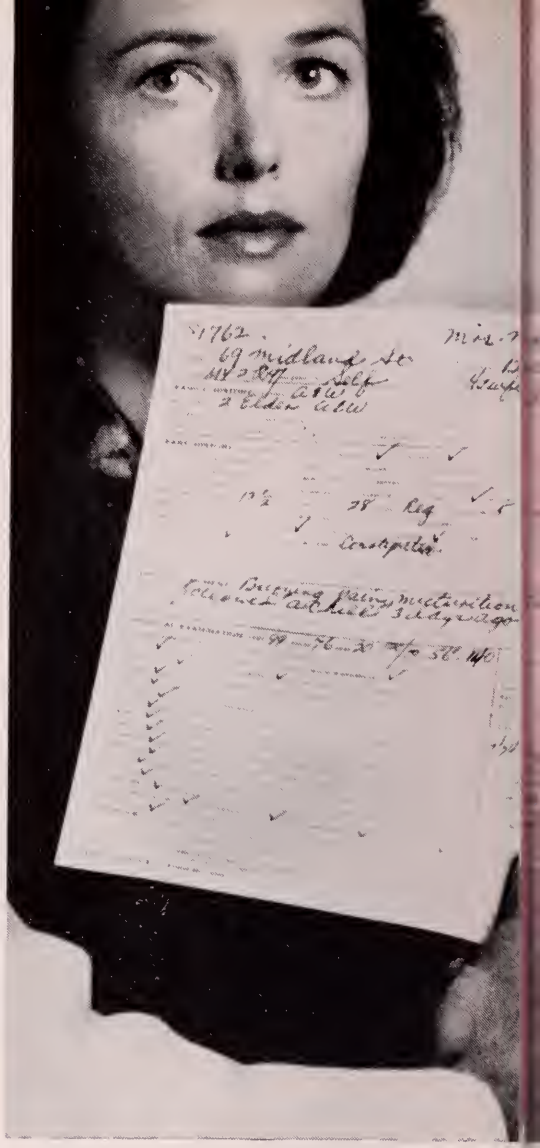
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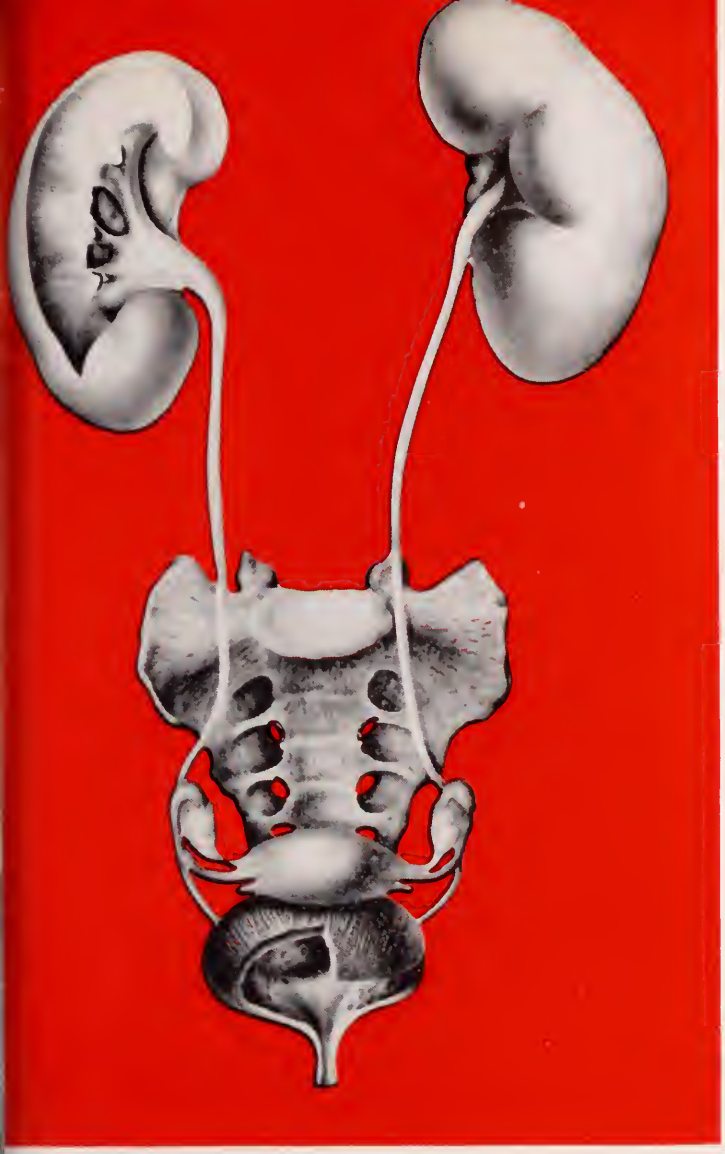


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Askue, Chester M., Port Charlotte
Barrs, Jack L., St. Petersburg
Beckman, Kendall M. Jr., Melbourne
Benton, Clem C. (Col.), Fort Pierce
Bibb, William J., Madison
Blakely, Gene T., Quincy
Bryan, R. Don, Valparaiso
Cambron, Charles R., Fort Pierce
Chambers, William E., Ocala
Childress, Robert C., Ocala
Clark, Irving T., Chattahoochee
Copeland, L. Vernon, DeLand
Connor, Gwendolyn S., Miami
Evans, Marshall, Cocoa Beach
Fleischaker, Jerry J., Tampa
Flavan, David B., St. Louis, Mo.
Gardner, William J., Tallahassee
Griffith, Henry W., Miami
Guerrieri, Louis R., Lakeland
Hoffman, Charles W. Jr., Hialeah
Holman, Franklin P., Umatilla
House, Edwin K. Jr., Brooksville
Ingham, John L., Key West
Johnson, John T., Sanford
Jorge, Wilfred, Chattahoochee
Katz, Sidney L., Sanford
Kuhn, Beatrice H., Key West
Langhorne, William H., Pensacola
Love, Edward C. Jr., Quincy
MacDonald, Donald I., Clearwater
Mezrah, Jack M., Tampa
Miller, Robert A., Naples
Moss, Jack W., Port Charlotte
Peirce, Kenneth E., Sanford
Perez, Maria P., Chattahoochee
Qualey, John R., Tampa
Raker, Ned T., Tampa
Rauschenberger, David S., Orange City
Reese, Owen Jr., Panama City
Robertson, Dudley S. Jr., Leesburg
Tate, Robert R., Cape Coral
Taylor, William G., Tampa
Todd, James W., Eustis
Wherry, Curtis G., Titusville
Wilson, Charles M., Port Charlotte
Zimmerman, Edward F., Miami

Associate

Anderson, Herbert C., Tallahassee
Anderson, William W., Miami
Angell, Edward D. M., Fort Lauderdale
Benavides, Jaime M., Key West
Berk, Marvin S., Gainesville
Biber, David, Gainesville
Blood, Arthur M., Orlando
Boulware, James R. III, Lakeland
Boyd, Greydon G., Delray Beach
Carbonell, Manuel L., Miami
Carducci, Alexander T., Orlando
Castillo, Ana, Miami
Cohen, Morris D., Miami
Demos, Menelaos P., Coral Gables
Des Jean, Paul A., Pompano Beach
Des Portes, William E., Sarasota

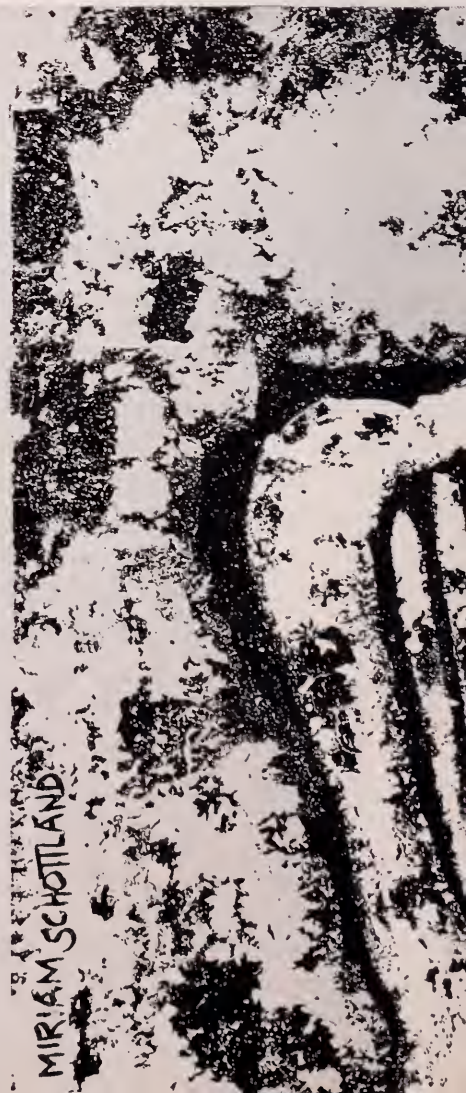
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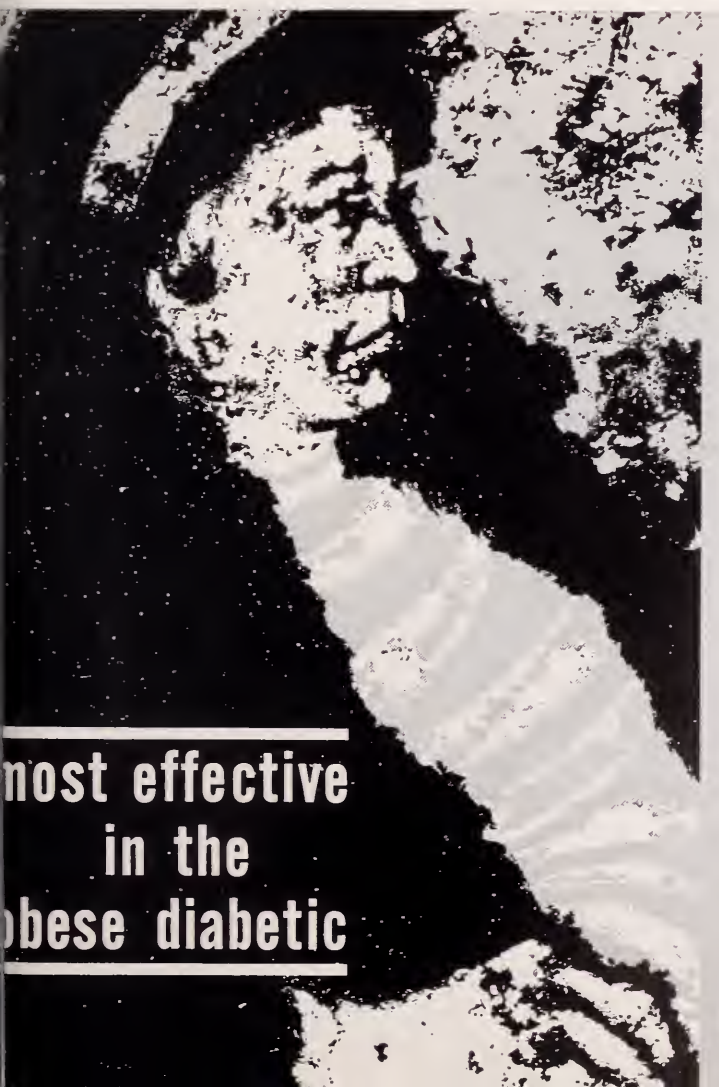
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Fortner, Billy W., Sarasota
Gianos, Sam N., Miami
Goldstein, Harold S., Miami
Gordon, Alen E., Hollywood
Hayes, Robert D., Pompano Beach
Hines, Kenneth K., Orlando
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Johnson, James M., Riviera Beach
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Lawton, Alfred H., Bay Pines
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Malzone, Ila M. Moser, Bay Pines
Malzone, Raymond J., St. Petersburg
Manginelli, Vitus W., St. Petersburg
Marvin, Lawrence L., Orlando
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Bibliography: 1. Williams, R. H.: Textbook of Endocrinology, Ed. 3, Saunders, Philadelphia, 1962, p. 610. 2. Gordon, E. S.: Metabolism 11:819, 1962. 3. Grodsky, G. M. et al.: Metabolism 12:278, 1963. 4. Sadow, H. S.: Metabolism 12:333, 1963. 5. West, K. M. and Tophoj, E.: Metabolism 10:689, 1961. 6. Yalow, R. S. and Berson, S. A.: Diabetes 9:254, 1960. 7. Weller, C. et al.: Scientific Exhibit, A.M.A., June 1962. 8. Weller, C. et al.: Metabolism 11:1134, 1962. 9. Radding, R. S. et al.: Metabolism 11:404, 1962.

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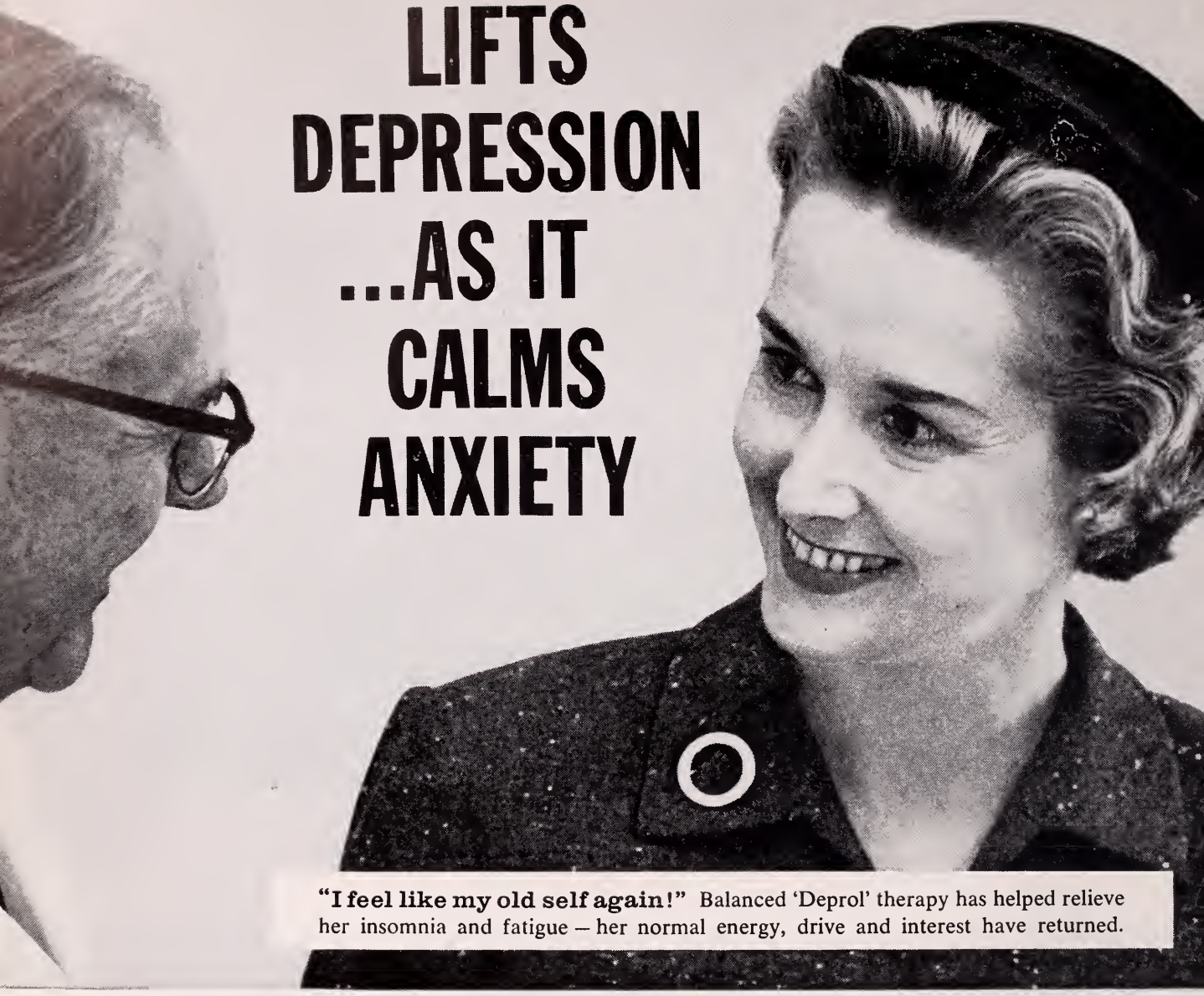
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References: 1. A.M.A. Council on Drugs: J.A.M.A. 183:469 (Feb. 9) 1963. 2. Gruenberg, F.: Curr. Ther. Res. 2:1 (Jan.) 1960.

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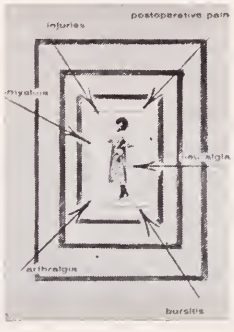
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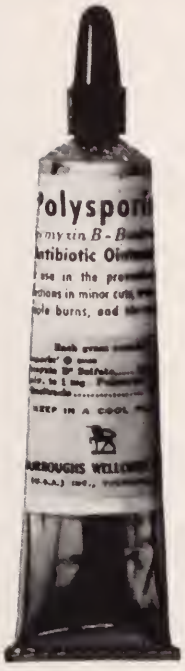
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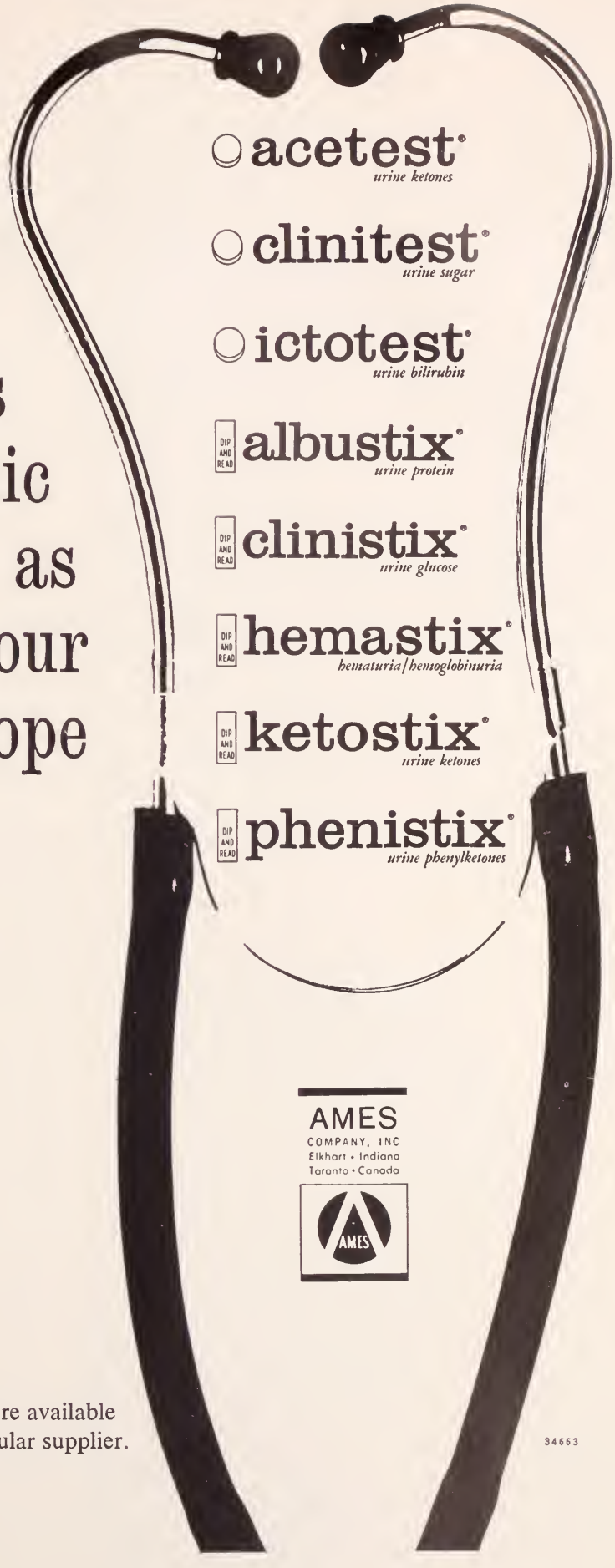
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